

Parts & Maintenance Manual

Jacobsen Turfcats® 500 Series

**Kubota D-905EB
Diesel Engine**

T523D 2WD Product No. 66146

**Kubota D-1105E
Diesel Engine**

T528D 2WD Product No. 66148

T528D 4WD Product No. 66149

**Kubota D-1105T
Diesel Engine**

T535D 4WD Product No. 66150

**Briggs & Stratton 580447
Gasoline Engine**

T531G 2WD Product No. 66151

BOB-CAT • BUNTON • CUSHMAN • JACOBSEN • RANSOMES • RYAN



WARNING: *If incorrectly used this machine can cause severe injury. Those who use and maintain this machine should be trained in its proper use, warned of its dangers and should read the entire manual before attempting to set up, operate, adjust or service the machine.*

TEXTRON

TURF CARE AND SPECIALTY PRODUCTS

To Order Parts

1. Write your **full** name and **complete** address on the order.
2. Explain where and how to make shipment.
3. Give product number, name and serial number that is stamped on the name plate or serial plate of your product.
4. Order by the quantity desired, the part number, paint code, and description of the part as given in the parts list.
5. Send or bring the order to an authorized Textron Turf Care And Specialty Products Dealer.
6. Inspect all shipments on receipt. If any parts are damaged or missing, file a claim with the carrier before accepting.
7. Do not return material without a letter of explanation, listing the parts being returned. Transportation charges must be prepaid.

Use of other than Textron Turf Care And Specialty Products authorized parts will void the warranty.

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This manual is designed for the Maintenance and Adjustment of this equipment.

Use the maintenance and adjustment instructions included in this manual and the operating instructions included in the **Safety and Operation Manual** to service the machine.

The **Safety and Operation Manual** must be kept in the pouch on the back of the seat at all times for reference by the operator.

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Suggested Stocking Guide

To Keep your Equipment fully operational and productive, maintain a stock of the more commonly used maintenance items. We have included part numbers for additional support materials and training aids. A more complete listing of accessories and attachments can be found in the Specifications Section

Service Parts

Qty.	Part No.	Description	Qty.	Part No.	Description
	557759	Diesel Engine Oil Filter		5003069	Gas Engine Oil Filter
	550489	Diesel Engine Fuel Filter Element		5003070	Gas Engine Fuel Filter Element
	5003055	Diesel Ignition Key		558015	Gas Ignition Key
	5000919	Diesel Air Cleaner Element		5000913	Gas Air Filter Element
	5002892	Hydraulic Filter Element			

Service Support Material

Qty.	Part No.	Description	Qty.	Description
	2809903	Safety & Operation Manual		Service Manual
	2809902	Parts & Maintenance Manual		
	3005710	Engine Parts Catalog		

How To Use This Manual

Abbreviations

N/S - Not serviced separately, can only be obtained by ordering main component or kit.

AR -Variable quantity or measurement is required to obtain correct adjustment.

Symbols such as ▲, next to the item number, indicate that a note exists which contain additional information important in ordering that part.

Indented Items

Bulleted items indicate component parts that are included as part of an assembly or another component. These parts can be ordered separately or as part of the main component.

Item	Part No.	Qty	Description	Serial Numbers/Notes
▲ 1	123456	1	Mount, Valve	Indicates a piece part
2	789012	1	Valve, Lift	Includes Items 2 and 3
3	345678	1	• Handle	Serviced part included with Item 2
4	N/S	1	• Seal Kit	Non serviced part included with Item 2
5	901234.6	1	Screw, 1/4-20 x 2" Hex Head	Indicates a part painted Jacobsen Orange

1 SAFETY

1.1 OPERATING SAFETY



WARNING

EQUIPMENT OPERATED IMPROPERLY OR BY UNTRAINED PERSONNEL CAN BE DANGEROUS.

Familiarize yourself with the location and proper use of all controls. Inexperienced operator's should receive instruction from someone familiar with the equipment before being allowed to operate the machine.

1. Safety is dependent upon the awareness, concern and prudence of those who operate or service the equipment. Never allow minors to operate any equipment.
2. It is your responsibility to read this manual and all publications associated with this equipment (Safety and operation manual, engine manual, accessories and attachments). If the operator can not read English it is the owner's responsibility to explain the material contained in this manual to them.
3. Learn the proper use of the machine, the location and purpose of all the controls and gauges before you operate the equipment. Working with unfamiliar equipment can lead to accidents.
4. Never allow anyone to operate or service the machine or its attachments without proper training and instructions; or while under the influence of alcohol or drugs.
5. Wear all the necessary protective clothing and personal safety devices to protect your head, eyes, ears hands and feet. Operate the machine only in daylight or in good artificial light.
6. Inspect the area where the equipment will be used. Pick up all the debris you can find before operating. Beware of overhead obstructions (low tree limbs, electrical wires, etc.) and also underground obstacles (sprinklers, pipes, tree roots, etc.) Enter a new area cautiously. Stay alert for hidden hazards.
7. Never direct discharge of material toward bystanders, nor allow anyone near the machine while in operation. The owner/operator can prevent and is responsible for injuries inflicted to themselves, to bystanders and damage to property.
8. Never operate equipment that is not in perfect working order or is without decals, guards, shields, discharge deflectors or other protective devices securely fastened in place.
9. Never disconnect or bypass any switch.
10. Carbon monoxide in the exhaust fumes can be fatal when inhaled. Never operate the engine without proper ventilation.
11. Fuel is highly flammable, handle with care.
12. Keep the engine clean. Allow the engine to cool before storing and always remove the ignition key.
13. Disengage all drives and engage parking brake before starting the engine (motor). Start the engine only when sitting in operator's seat, never while standing beside the unit.
14. Equipment must comply with the latest federal, state, and local requirements when driven or transported on public roads.
15. Never use your hands to search for oil leaks. Hydraulic fluid under pressure can penetrate the skin and cause serious injury.
16. Operate the machine up and down the face of the slopes (vertically), not across the face (horizontally).
17. To prevent tipping or loss of control, do not start or stop suddenly; reduce speed when making sharp turns. Use caution when changing direction on slopes.
18. Always use the seat belt when operating tractors equipped with a ROPS.
Never use a seat belt when operating tractors without a ROPS.
19. Keep legs, arms and body inside the seating compartment while the vehicle is in motion.

This machine is to be operated and maintained as specified in this manual and is intended for the professional maintenance of specialized turf grasses. It is not intended for use on rough terrain or long grasses.

1.2 IMPORTANT SAFETY NOTES



This safety alert symbol is used to alert you to potential hazards.

DANGER - Indicates an imminently hazardous situation which, if not avoided, **WILL** result in death or serious injury.

WARNING - Indicates a potentially hazardous situation which, if not avoided, **COULD** result in death or serious injury.

CAUTION - Indicates a potentially hazardous situation which, if not avoided, **MAY** result in minor or moderate injury and property damage. It may also be used to alert against unsafe practices.

For pictorial clarity, some illustrations in this manual may show shields, guards or plates open or removed. Under no circumstances should this equipment be operated without these devices securely fastened in place

WARNING

The operator back-up system on this tractor prevents the tractor from starting unless the brake pedal is engaged, mower switch is off and traction pedal is in neutral. The system will stop the engine if the operator leaves the seat without engaging the parking brake and setting the mower switch off.

NEVER operate tractor unless the operator back-up system is working.

WARNING

1. Before leaving the operator's position for any reason:
 - a. Return traction pedal to neutral.
 - b. Disengage all drives.
 - c. Lower all implements to the ground.
 - d. Engage parking brake.
 - e. Stop engine and remove the ignition key.
2. Keep hands, feet, and clothing away from moving parts. Wait for all movement to stop before you clean, adjust or service the machine.
3. Keep the area of operation clear of all bystanders and pets.
4. Never carry passengers, unless a seat is provided for them.
5. Never operate mowing equipment without the discharge deflector securely fastened in place.

By following all instructions in this manual, you will prolong the life of your machine and maintain its maximum efficiency. Adjustments and maintenance should always be performed by a qualified technician.

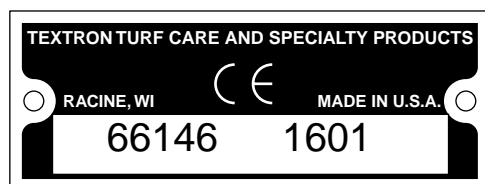
If additional information or service is needed, contact your Authorized Textron Turf Care and Specialty Products Dealer who is kept informed of the latest methods to service this equipment and can provide prompt and efficient service. **Use of other than original or authorized Textron Turf Care and Specialty Products parts and Accessories will void the warranty.**

2 SPECIFICATIONS

2.1 PRODUCT IDENTIFICATION

66146.....	T523D, 2 Wheel Drive
66148.....	T528D, 2 Wheel Drive
66149.....	T528D, 4 Wheel Drive
66150.....	T535D, 4 Wheel Drive
66151.....	T531G, 2 Wheel Drive

Serial Number An identification plate, like the one shown, listing the serial number, is attached to the frame of the tractor and is located on the operator's right just over the rear axle.



Always provide the serial number of the unit when ordering replacement parts or requesting service information.

Product	EEC Sound Power	Sound Pressure Level Operator Ear	Vibration M/S ²	
			Arms	Body
66146	< 90 dba	< 105 dba	3.38	0.084
66148	< 90 dba	< 105 dba	3.38	0.084
66149	< 90 dba	< 105 dba	3.38	0.084
66150	< 90 dba	< 105 dba	3.38	0.084
66151	< 90 dba	< 105 dba	3.38	0.084

2.2 TRACTOR

Tires:

Front	23 x 10.5 - 12, 2 ply
Rear	16 x 7.5 - 8, 4 ply
Pressure	10-12 psi (69 - 83 kPa)

Recommended Battery. Size

Standard	12V, AABM Group 22NF 250 Cold Cranking amps
Cold Weather	12V, AABM Group 45 GMP 400 Cold cranking amps

Service Brake Dynamic braking through traction circuit

Parking Brake..... 7 x 1.75in. (178 x 44 mm)
drum type

Speed:

Forward (2 WD)	0 - 10.6 mph (17.1kph)
Forward (4 WD)	0 - 6.6 mph (10.6 kph)
Reverse	0 - 5.2 mph (8.4 kph)

Turning Radius 20 in. (51.2 cm) left
22.5 in. (57.6 cm) right

Production:

60 in.	2.8 acres/hr @ 6 mph
72 in.	3.5 acres/hr @ 6 mph

Decks

Side discharge	60 in. (152 cm) 72 in. (183 cm)
Rear Discharge	60 in. (152 cm) 72 in. (183 cm)
Mulcherizer	60 in. (152 cm) 72 in. (183 cm)

Flail	60 in. (152 cm)
Tire Pressure	22-24 psi (152-165 kPa)

Hydraulic System:

Capacity.....	8 U.S. gal. (30.3 liter)
Fluid Type	ISO VG68
Cooling	Oil Cooler
Return Line Filter	10 micron
Traction.....	Hydrostatic transmission
Steering	Hydraulic power steering

Dimensions (Tractor only):

Length.....	89.3 (229 cm)
Height	42.5 (109 cm) to top of hood
Width	53.0 (136 cm)
Wheel Base	59.5 (152 cm)
Ground Clearance	7.6 (19.5 cm)

Weights:

Tractor only.....	1300 lbs. (590 kg)
Tractor with decks:	
60 in. Side discharge	1600 lbs. (726 kg)
60 in. Rear discharge	1635 lbs. (742 kg)
72 in Side Discharge	1685 lbs. (766 kg)
72 in. Rear Discharge.....	1660 lbs. (755 kg)
60 in. Mulcherizer	1575 lbs. (716 kg)
72 in. Mulcherizer	1660 lbs. (755 kg)
60 in. Flail	1666 lbs. (757 kg)

2.3 ENGINE

	T523D	T528D	T535D	T531G
Make	Kubota	Kubota	Kubota	Briggs & Stratton
Model	D905 E	D1105 E	D1105 TB	580447 0115 E2
Type - 4 cycle, liquid cooled	Diesel	Diesel	Diesel	Gas
Horsepower @ 3000 rpm - Hp (kW)	22.5 (16.8)	28 (20.9)	33 (24.6)	31 (23)
Displacement - in ³ (cm ³)	54.9 (899)	68.5 (1123)	68.5 (1123)	58.1 (952)
Torque @ 2200 rpm - ft.lbs. (Nm)	39.7 (53.8)	54 (73)	60 (81)	50.5 (68.4)
Fuel Type Minimum Rating Capacity - U.S. gal. (liters)	No. 2 Diesel Cetane rating - 45 12 (45.4)			Unleaded Gasoline Octane - 85 12 (45.4)
High speed - rpm	3150 no load			3150 no load
Low Idle - rpm	1750 no load			1200 no load
Lubrication Type Capacity Classification	SAE10 W30 5.4 qt. (5.1 liters) CD, CE			SAE 10W30 3.5 qt. (3.3 liter) SE or higher
Air Filter	Dry type with service indicator			
Alternator - Amp	40			

2.4 ACCESSORIES

Refer to your area Textron Turf Care And Specialty Products Dealer to order the following accessories and attachments.

Caster Wheel Kit solid - for 60 in (152 cm) deck
 Caster Wheel Kit pneumatic - for 60 in (152 cm) deck
 Caster Wheel Kit solid - for 72 in (183 cm) deck
 Caster Wheel Kit pneumatic - for 72 in 183 cm) deck
 Canopy/Sunshaderequires 2 post ROPS
 ROPS, 2 postwith seat belt
 Differential Lock Kit
 Four Wheel Drive Kit.....
 Light Kit
 Standard Seat Suspension
 Deluxe Seat Suspension.....

Arm Rests(2)
 Quick Disconnect..... Full kit - tractor and attachment
 Quick DisconnectHalf kit - tractor or attachment
 Rear Wheel Weights.....
 Front Wheel Weights
 Air Blow Gun.....
 Orange Touch-up Paint 12 oz. spray
 Tire Chains

2.5 SUPPORT LITERATURE

Contact your Textron Turf Care And Specialty Products Dealer for a complete listing of literature.

Safety and Operation Manual
 Parts and Maintenance Manual
 Rotary Mower Parts and Maintenance Manual
 Operator Training Video
 Service & Repair Manual
 Engine Manuals - consult engine manufacturer

3 ADJUSTMENTS

3.1 GENERAL

WARNING

To prevent injury, lower implements to the ground, disengage all drives, engage parking brake, stop engine and remove key from ignition switch before making any adjustments or performing maintenance.

Make sure the tractor is parked on a solid and level surface. Never work on a tractor that is supported only by the jack. Always use jack stands.

If only the front or rear of the tractor is raised, place chocks in front of and behind the wheels that are not raised.

1. Adjustments and maintenance should always be performed by a qualified technician. If proper adjustment cannot be made, contact an authorized Textron Turf Care And Specialty Products Dealer.
2. Replace, do not adjust, worn or damaged components.
3. Do not wear jewelry or loose fitting clothing when making adjustments or repairs.



CAUTION: *Be careful to prevent entrapment of the hands and fingers between moving and fixed components of the machine*

4. Do not change governor settings or overspeed the engine.
5. For adjustments and maintenance of the cutting unit, refer to the Rotary Mower Maintenance Manual.

3.2 INSTALLING DECK

Assemble decks following instructions included in accessory manual. For installation on tractor follow instructions below.

1. Remove push arms **(B)** from deck and install them on tractor as shown.
2. Position deck in front of tractor and attach arms to deck. Install pivot pins **(D)** in arm so cotter pins face the inside of the deck as shown.
3. Attach chain **(E)** to deck and lift arm on tractor as shown. Use correct hole for deck size.

Hole	Deck Size
2	72" (185 cm)
1	60" (154 cm)

4. Lubricate spline **(C)** in deck using NLGI Grade 2 grease. Install motor as shown and secure using capscrew and lockwasher supplied with deck.
5. Set cutting height.

Other Attachments

For assembly and installation of flail and other attachments refer to manual supplied with them.

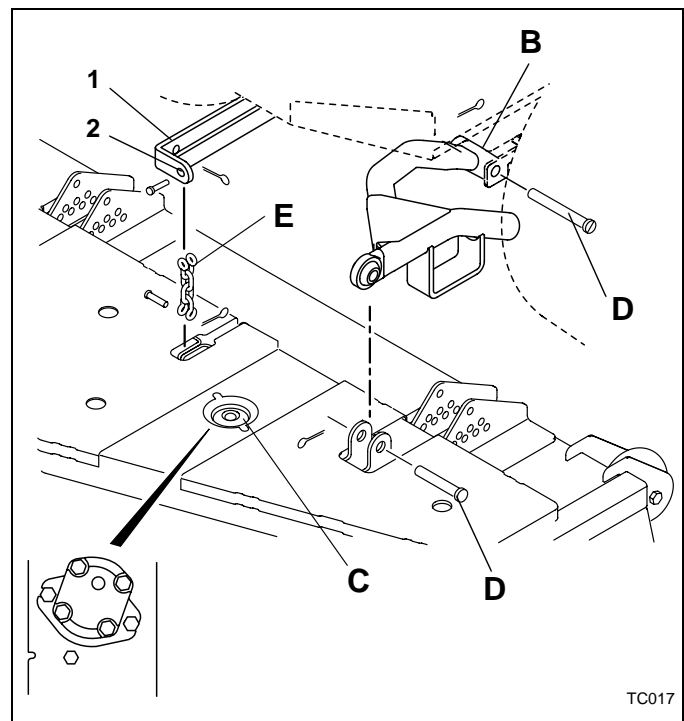


Figure 3A

3.3 NEUTRAL ADJUSTMENT

The traction pedal is designed to return to neutral whenever the forward or reverse foot pedals are released. If the tractor continues to creep after the traction pedal is released, check neutral adjustment and adjust traction pedal linkage.

1. Disconnect pump linkage from traction pedal.
2. With linkage disconnected, check position of return arm on drive pump. Pointer (**E**) on arm should be centered in the **sensing area** of the switch (**G**).

Note: This switch forms part of the operator back-up system and senses when the traction pedal is in neutral. If the operator back-up system fails to operate properly have the switch checked and replaced before operating tractor.

3. To adjust pointer, loosen the two screws (**F**) holding return arm bracket to pump. Position bracket until pointer is centered. Tighten bracket in place.
4. Check operator back-up system and operation of traction pedal after adjustment has been made.

Four Wheel Drive

Machines equipped with four wheel drive include a switch to prevent operation of four drive in reverse. This switch is located on the same bracket as the neutral switch. When replacing switch the sensing area (**H**) must be positioned under return arm as shown with pump in neutral.

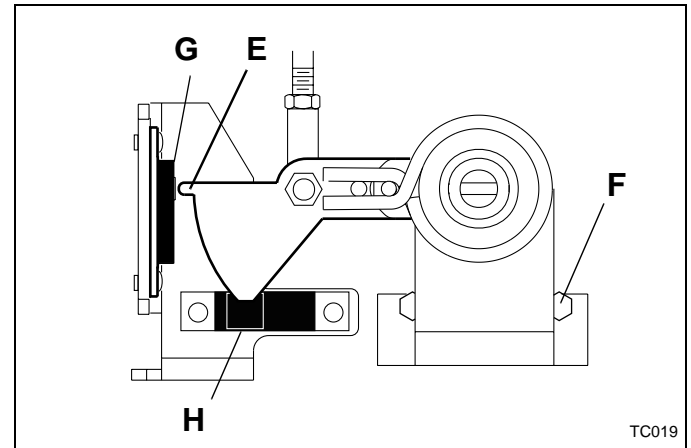


Figure 3B

3.4 SPEED

Before making any speed adjustment at pump, check that the engine is operating at full rpm, under load, and throttle lever is set correctly. If adjustment is required, it is only necessary to adjust forward speed.

To limit forward speed while mowing adjust traction pedal speed limiter, Section 3.6.

1. Check neutral adjustment and adjust if required.
2. Disconnect rod end (**I**) from traction pedal.
3. Push traction pedal forward (**J**) until it touches floor panel.
4. Push return arm (**K**) on drive pump back until it hits internal stop on pump housing. In this position the pump is at full stroke.
5. With both the pump and traction pedal at full forward stroke, adjust rod end (**I**) at pedal in or out so it aligns directly with hole (**L**) in link arm.

Note: Additional adjustment can be made on rod end at pump if necessary.

6. Connect rod end to pedal and tighten jam nut on rod to secure adjustment.

7. Check operator back-up system and operation of traction pedal after adjustment has been made.

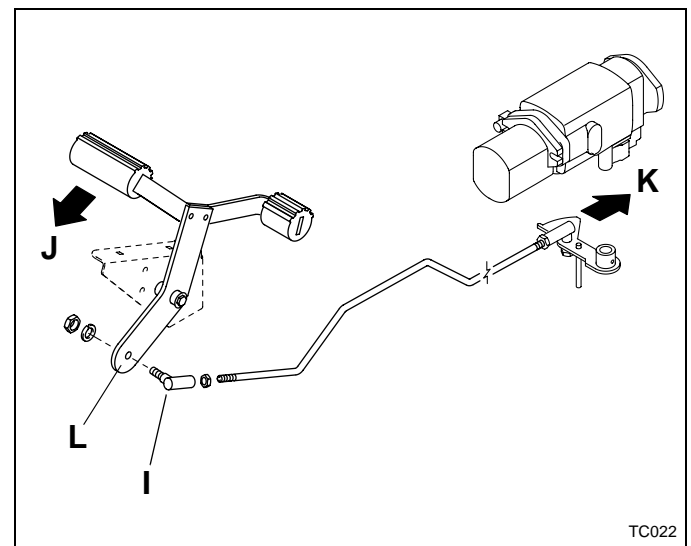


Figure 3C

3 ADJUSTMENTS

3.5 PARKING BRAKE / TURN ASSIST PEDALS

The turn assist pedals provide independent braking of the left and right front wheels to allow for tight turns. When operated together with the brake lock they act as a parking brake.

These brakes are self-adjusting and should not require additional adjustment under normal operating conditions. However, if pedal travel becomes excessive, or brakes have been replaced or serviced, minor adjustments may be required.

If linings or brake drums appear worn or damaged, have them replaced immediately by an experienced service technician.

Left and right brake cables are adjusted independently of each other.

To adjust brakes:

1. Check brake return spring adjustment (**P**). With brake pedal released spring should measure 1-1/8 inch (29 mm).
2. Check that brake free travel measures 1 in. (25 mm). Use nuts (**O**) to adjust free travel as required.
3. Repeat procedure for other brake.

Start tractor and check operation of turn assist pedals.

To check parking brake park tractor on an incline (approx. 16.7° slope) and engage and lock parking brake. Brake must prevent tractor from rolling.

Brake Switch

The brake switch (**M**) forms part of the operator back-up system and senses when the parking brake is engaged. This switch cannot be adjusted. If the operator back-up system fails to operate properly have the switch checked and replaced before operating tractor.

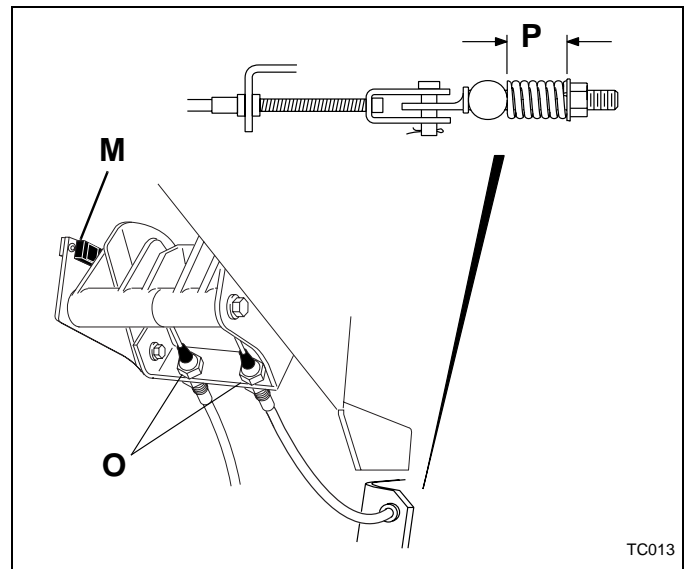


Figure 3D

3.6 TRACTION PEDAL SPEED LIMITER

Cutting quality is better at speeds well below the transport speed of the tractor. An initial mow speed of five to six mph is set at the factory and should be satisfactory for most cutting conditions. Local turf conditions however may respond better to a different speed.

To set mow speed, loosen jam nut (**Q**) and adjust stop screw up to reduce speed, down to increase speed. Tighten nut to hold adjustment in place.

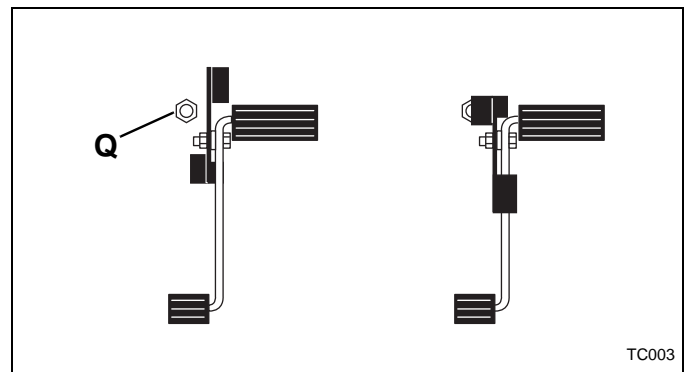


Figure 3E

3.7 ENGINE BELT

Inspect and adjust new belt after first 50 hours of operation. Check and adjust annually thereafter.

Adjust alternator pulley so belt deflects 1/4" to 5/16" (6 -8 mm) with a 20 lb. push at midpoint between pulleys. See engine manual.

To adjust, loosen alternator mounting bolts **(A)** and adjust alternator until proper belt tension is achieved, then retighten bolts.

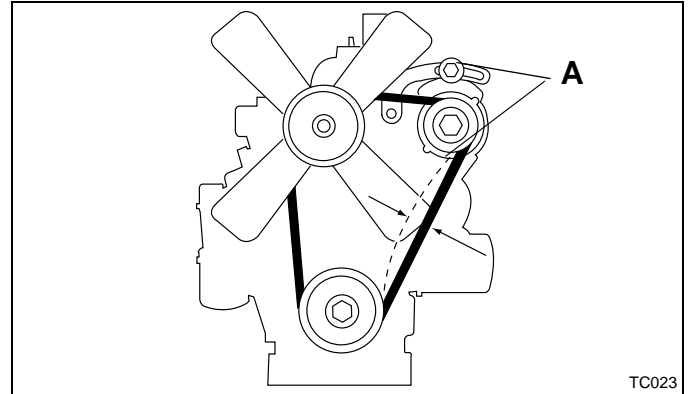


Figure 3F

3.8 THROTTLE AND CHOKE

Check throttle adjustment, if engine runs below recommended rpm with throttle lever in its high speed position. On tractors equipped with gas engines adjust choke control, if engine is hard to start.

For other engine adjustments refer to the Engine Owner's Manual supplied by the engine manufacturer.

Gas engines

1. Position throttle lever in its high speed position so that 1/16 - 1/4 in. (2-6 mm) gap exists between lever and panel. See E- Figure 3H.
2. Pull up choke control on instrument panel to its choke position.
3. Loosen cable casing clamp screw **(A)** on engine.
4. Move throttle casing and wire **(B)** until throttle lever on engine touches high speed screw **(C)**. Move choke cable and casing **(D)** until choke valve is completely closed
5. Tighten casing clamp **(A)**.

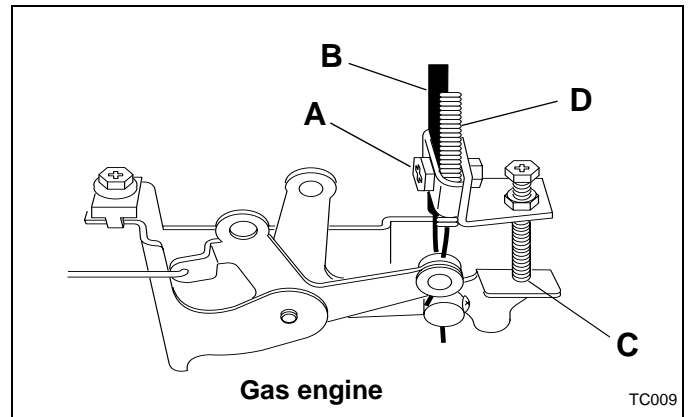


Figure 3G

Diesel Engines

1. Remove side cover from instrument panel.
2. Position throttle lever in its high speed position so that 1/16 - 1/4 in. (2-6 mm) gap exists between lever and panel **(E)**.
3. With throttle lever on engine against max. speed stop, adjust throttle cable nuts **(A)** so that eyelet **(B)** on cable fits over on pin as shown.
4. Install push nut so that eyelet slides freely when lever is rotated.

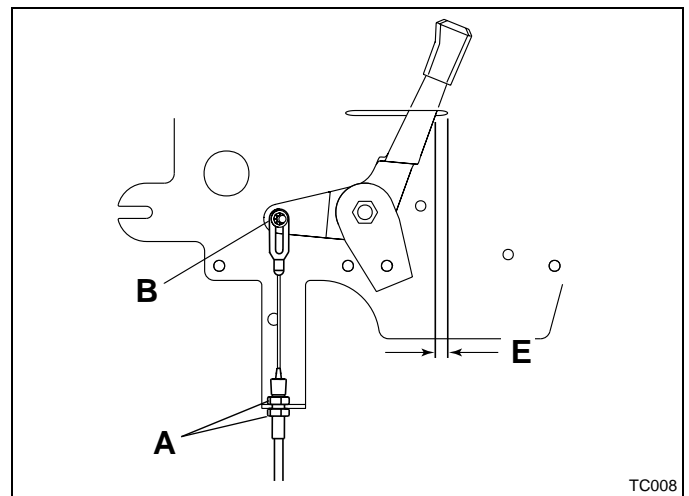


Figure 3H

4 MAINTENANCE

4.1 GENERAL

WARNING

Before you clean, adjust, or repair this equipment, disengage all drives, lower implements to the ground, engage parking brake, stop engine and remove key from ignition switch to prevent injuries

Make sure the tractor is parked on a solid and level surface. Never work on a tractor that is supported only by the jack. Always use jack stands.

1. Adjustment and maintenance should always be performed by a qualified technician. If proper adjustments cannot be made, contact an Authorized Textron Turf Care And Specialty Products Dealer.
2. Inspect the equipment on a regular basis, establish a maintenance schedule and keep detailed records.
 - a. Keep the equipment clean.
 - b. Keep all moving parts properly adjusted and lubricated.
- c. Replace worn or damaged parts before operating the machine.
- d. Keep all fluids at their proper levels.
- e. Keep shields in place and all hardware securely fastened.
- f. Keep tires properly inflated.
3. Do not wear jewelry or loose fitting clothing when making adjustments or repairs.
4. Use the illustrations in the Parts Catalog as reference for the disassembly and reassembly of components.
5. Recycle or dispose of all hazardous materials (batteries, fuel, lubricants, anti-freeze, etc.) according to local, state or federal regulations.
6. For adjustments and maintenance of the cutting unit, refer to the Rotary Mower Maintenance Manual.

4.1 ENGINE

IMPORTANT: A separate Engine Manual, prepared by the engine manufacturer, is supplied with this tractor. Read the engine manual carefully until you are familiar with the operation and maintenance of the engine. Proper attention to the engine manufacturer's directions will assure maximum service life of the engine. To order replacement engine manuals contact the engine manufacturer.

The proper break-in of a new engine can make a considerable difference to the performance and life of the engine.

During the break-in period, Textron Turf Care And Specialty Products recommends the following:

1. During the first 50 hours of operation, a new engine should be allowed to reach an operating temperature of at least 140°F (60°C) prior to operation at full load.

2. Check the engine oil level twice daily during the first 50 hours of operation. Higher than normal oil consumption is not uncommon during the initial break-in period.
3. Change engine oil and oil filter element after first 50 hours of operation.
4. Check and adjust fan and alternator belt.
5. Refer to Section 5.2 and Engine Manual for specific maintenance intervals.

If the injection pump, injectors or the fuel system require service, contact an authorized Textron Turf Care And Specialty Products Dealer.

Note: *The tractor is designed to operate and cut most efficiently at the preset governor setting. Do not change the engine governor settings or overspeed the engine.*

4.2 ENGINE OIL

Check the engine oil at the start of each day, before starting the engine. If the oil level is low, remove oil filler cap and add oil as required. Do not overfill.

Perform initial oil change after first 50 hours of operation. Change every 200 hours thereafter.

Refer to engine specifications, Section 2.3 and engine manufacturer's Owner's manual for oil requirements.

4.3 AIR FILTER

Check the service indicator daily. Replace air cleaner element immediately when red band become visible **(A)**.

Do not remove the element for inspection or cleaning. Unnecessary removal of the filter increases the risk of injecting dust and other impurities into the engine.

When service is required, first clean the outside of the filter housing; then remove the old element as gently as possible and discard.

1. Carefully clean the inside of the filter housing without allowing dust into the air intake.
2. Inspect the new element. Do not use a damaged element and never use an incorrect element.
3. Assemble the new element and make sure it seats properly. Reset the indicator by depressing button **(B)**.

4. Reassemble cap making sure it seals completely around the filter housing. Dust evacuator **(C)** must be facing down.
5. Check all hoses and air ducts. Tighten hose clamps.

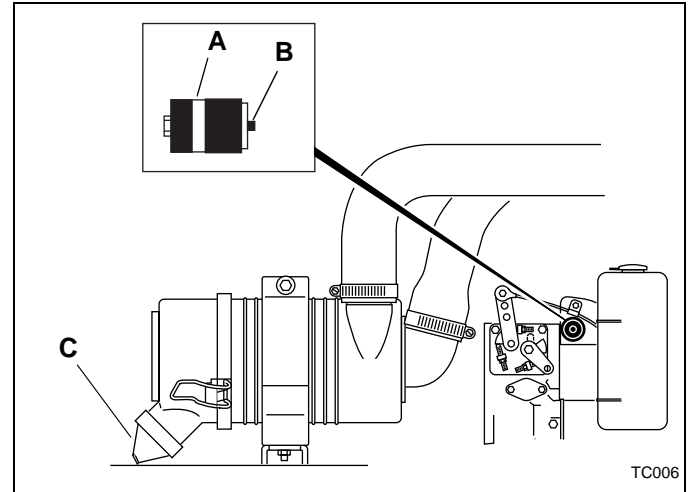


Figure 4A

4.4 FUEL

Handle fuel with care - it is highly flammable. Use an approved container, the spout must fit inside the fuel filler neck. Avoid using cans and funnels to transfer fuel.

! WARNING !

Never remove the fuel cap from the fuel tank, or add fuel, when the engine is running or while the engine is hot.

Do not smoke when handling fuel. Never fill or drain the fuel tank indoors.

Do not spill fuel and clean spilled fuel immediately.

Never handle or store fuel containers near an open flame or any device that may create sparks and ignite the fuel or fuel vapors.

Be sure to reinstall and tighten fuel cap securely.

- Fill fuel tank to full mark on fuel gauge.
- For diesel engines use clean, fresh, #2 Diesel fuel. minimum cetane rating 45. For gasoline engines use, clean, fresh, regular grade unleaded gasoline, minimum octane 85.

- Store fuel according to local, state or federal ordinances and recommendations from your fuel supplier.
- Never overfill or allow the tank to become empty.

Read Engine Owner's Manual for additional fueling information.

4 MAINTENANCE

4.5 FUEL SYSTEM

Refer to Section 5.2 for specific maintenance intervals.

Visually check fuel lines and clamps daily, before operating tractor. Replace fuel lines and clamps at the first sign of damage.

Before replacing any filter, thoroughly clean the filter housing and the area around the filter. Dirt must not be allowed to enter into fuel system.

Bleed the fuel system after the fuel filter and lines have been removed, or the fuel tank has become empty. See Engine Manual.

To change fuel filter:

1. Close fuel valve on tank; then remove and discard the existing filter.
2. For spin on type filters, apply a light coat of oil to the gasket and hand tighten new filter.
3. Fill fuel tank. On tractors equipped with diesel engines open fuel valve and bleed the filter. See Engine Manual.

4.6 BATTERY

Make absolutely certain the ignition switch is “Off” and the key has been removed before servicing the battery.



CAUTION: *Always use insulated tools, wear protective glasses or goggles and protective clothing when working with batteries. You must read and obey all battery manufacturer's instructions.*

Tighten cables securely to battery terminals and apply a light coat of silicone dielectric grease to terminals and cable ends to prevent corrosion. Keep vent caps and terminal covers in place

Check the electrolyte level every 100 hours. Keep the cable ends, battery and battery posts clean.

Verify battery polarity before connecting or disconnecting the battery cables.

1. When installing the battery, always assemble the RED, positive (+) battery cable first and the ground, BLACK, negative (-) cable last.
2. When removing the battery, always remove the ground, BLACK, negative (-) cable first and the RED, positive (+) cable last.
3. Make sure battery is properly installed and secured to the battery tray.

4.7 JUMP STARTING

Before attempting to “jump start” the tractor, check the condition of the discharged battery. Section 4.6



WARNING

Batteries generate explosive hydrogen gas. To reduce the chance of an explosion, avoid creating sparks near battery. Always connect the negative jumper cable to the frame of the tractor with the discharged battery, away from the battery.

When connecting jumper cables:

1. Stop the engine on vehicle with good battery.
2. Connect RED jumper cable to the positive (+) terminal on the good battery and to the positive (+) terminal on the “discharged” battery.
3. Connect the BLACK jumper cable from the negative (-) terminal on the good battery to the **frame** of tractor with discharged battery.

After cables have been connected, start the engine on the vehicle with the good battery then start the tractor.

4.8 CHARGING BATTERY

WARNING

Charge battery in a well ventilated area. Batteries generate explosive gases. To prevent an explosion, keep any device that may create sparks or flames away from the battery.

To prevent injury, stand away from battery when the charger is turned on. A damaged battery could explode.

1. Refer to Section 4.6. Read the Battery and Charger's manual for specific instructions.

2. Whenever possible, remove the battery from the tractor before charging. If battery is not sealed, check that the electrolyte covers the plates in all the cells.
3. Make sure the charger is "Off", then connect the charger to the battery terminals as specified in the charger's manual.
4. Always turn the charger "Off" before disconnecting charger from the battery terminals.

4.9 HYDRAULIC HOSES

WARNING

To prevent serious injury from hot, high pressure oil, never use your hands to check for oil leaks, use paper or cardboard.

Hydraulic fluid escaping under pressure can have sufficient force to penetrate skin. If fluid is injected into the skin it must be surgically removed within a few hours by a doctor familiar with this form of injury or gangrene may result.

1. Always lower implements to ground, disengage all drives, engage parking brake, stop engine and remove key before inspecting or disconnecting hydraulic lines or hoses.
2. Check visible hoses and tubes daily. Look for wet hoses or oil spots. Replace worn or damaged hoses and tubes before operating the machine.
3. The replacement tube or hoses must be routed in the same path as the existing hose, do not move clamps, brackets and ties to a new location.

4. Thoroughly inspect all tubes, hoses and connections every 200 hours.

IMPORTANT: The hydraulic system can be permanently damaged if the oil becomes contaminated. Before disconnecting any hydraulic component, clean the area around the fittings and the hose ends to keep impurities out of the system.

- a. Before disconnecting any hydraulic component, tag or mark the location of each hose then clean the area around the fittings.
- b. As you disconnect the component, be prepared to assemble plugs or caps to the hose ends and open ports. This will keep impurities out of the hydraulic system and also prevent oil spills.
- c. Make sure "O" rings are clean and hose fittings are properly seated before tightening.
- d. Keep the hose from twisting. Twisted hoses can cause couplers to loosen as the hose flexes during operation resulting in oil leaks.
- e. Kinked or twisted hoses can restrict the oil flow causing the system to malfunction and the oil to overheat and also lead to hose failure.

4 MAINTENANCE

4.10 HYDRAULIC OIL

Refer to Section 5.2 for specific maintenance intervals.

Drain and replace the hydraulic oil if you notice the presence of water or foam in the oil, a rancid odor (indicating excessive heat). or after a major component failure.

To change hydraulic oil:

1. Clean the area around the oil cap to prevent impurities from entering and contaminating the system.
2. Remove drain plug from bottom of tank.
3. After oil has drained install drain plug and fill with the correct Textron Turf Care And Specialty Products hydraulic oil, Section 5.2.
4. Purge air from system.
 - a. To prevent reels from overheating, disconnect motors from reels.
 - b. Operate all tractor functions for about 5 minutes to purge air out of the system and stabilize the oil level.
 - c. Once the level has stabilized and the air is

purged, fill the tank to the full mark on gauge

Hydraulic Filter

The hydraulic system is protected by a 10 micron filter **(A)**. Replace filter whenever changing hydraulic oil.

Filter is located under frame and behind hydraulic tank. Drain oil before removing filter.

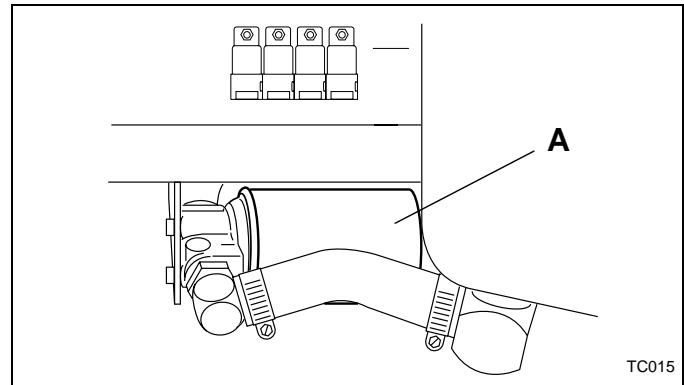


Figure 4B

4.11 ELECTRICAL SYSTEM



CAUTION: Always turn the ignition switch off and remove the negative battery cable (black) before inspecting or working on the electrical system.

To reduce electrical problems:

1. Make certain all terminals and connections are clean and properly secured.
2. Check the operator backup system, fuses and circuit breakers regularly.
3. If the operator backup does not function properly and the problem cannot be corrected, contact an authorized Textron Turf Care And Specialty Products Dealer.
4. Keep the wire harness and all individual wires away from moving parts to prevent damage.
5. Make sure the seat switch harness is connected to the main wire harness.
6. Check the battery and battery charging circuit.
7. Do not wash or pressure spray around electrical connections and components.

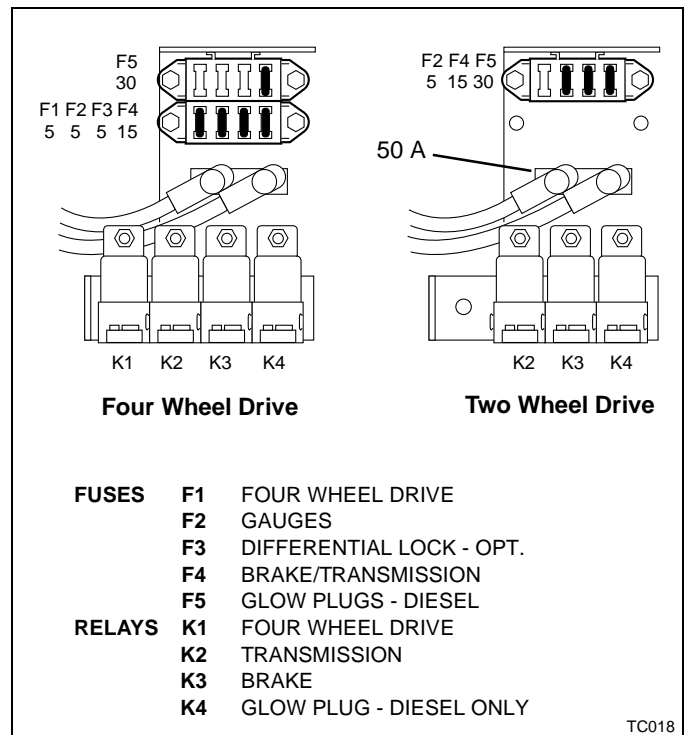


Figure 4C

4.12 MUFFLER AND EXHAUST



WARNING

Exhaust fumes contain carbon monoxide that is toxic and can be fatal when inhaled.

NEVER operate an engine without proper ventilation.

To protect from carbon monoxide poisoning, inspect the complete exhaust system regularly and always replace a defective muffler.

If you notice a change in the color or sound of the exhaust, stop the engine immediately. Identify the problem and have the system repaired.

Torque all exhaust manifold hardware evenly. Tighten or replace exhaust clamps.

4.13 RADIATOR



WARNING

To prevent serious bodily injury from hot coolant or steam blow-out, never attempt to remove the radiator cap while the engine is running. Stop the engine and wait until it is cool. Even then, use extreme care when removing the cap.



CAUTION: Do not pour cold water into a hot radiator. Do not operate engine without a proper coolant mixture. Install cap and tighten securely.

Check coolant level daily. Recovery bottle should be filled to the **cold** mark.

Drain and refill coolant system every two years. Remove the radiator cap, open the engine block drain and the radiator drain. Empty and clean the recovery bottle.

Mix clean water with ethylene glycol based anti-freeze for the coldest ambient temperature. Read and follow the instructions on the anti-freeze container and engine manual.

Keep radiator and hydraulic oil cooler air passages clean. Use compressed air (30 psi maximum) to clean the fins.

To clean radiator

1. Remove knobs **(A)** securing screen to oil cooler and remove screen. Pull oil cooler forward to provide access to radiator.
2. Use a blow gun to clean screen, oil cooler and radiator.
3. Check and tighten the fan belt annually. Replace clamps and hoses on radiator every two years.
4. If you have to add coolant more than once a month, or add more than one quart at a time, have a Textron Turf Care And Specialty Products Dealer check the cooling system.

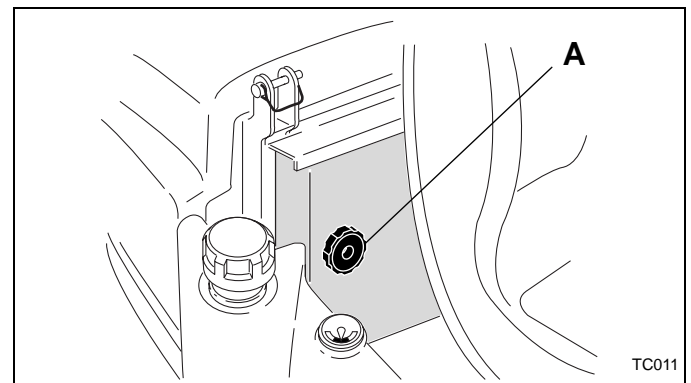


Figure 4D

4.14 ROLLOVER PROTECTION STRUCTURE (ROPS)

A Rollover Protection System (ROPS), designed for this tractor, is available as an optional accessory. If your tractor is equipped with this device, inspect it periodically and follow operating procedures described in the Safety and Operation Manual



CAUTION: Do not loosen or remove bolts; do not weld, drill, modify, bend or straighten a damaged structure.

1. The seat, the seat belt, mounting hardware and any accessories within the ROPS, should be inspected regularly and all damaged parts replaced immediately.
2. Once the ROPS has been subjected to any form of impact it should be replaced.
3. Check and retorque all hardware. All replacement components used for the ROPS must be as specified in the Parts Catalog.

4 MAINTENANCE

4.15 TIRES

1. Keep tires properly inflated to prolong tire life. Check inflation pressure while the tires are cool. Inspect tread wear.
2. Check pressure every 50 hours or once a month. Use an accurate, low pressure tire gauge.

3. Keep tires inflated to 10-12 psi (69 -83 kPa).



CAUTION: *Unless you have the proper training, tools and experience, DO NOT attempt to mount a tire on a rim. Improper mounting can produce an explosion which may result in serious injury.*

4.16 WHEEL MOUNTING PROCEDURE

WARNING

Make sure the tractor is parked on a solid and level surface. Never work on a tractor that is supported only by the jack. Always use jack stands.

If only the front or rear of the tractor is raised, place chocks in front of and behind the wheels that are not raised.

1. Remove dirt, grease and oil from stud thread. Do not lubricate threads.
2. Position wheel on hub and inspect to insure full contact between mounting surface of wheel and hub or brake drum.
3. Finger tighten all hardware then torque hardware in criss-cross order; always tighten nuts in the top position.
4. Check and retorque daily until torque is maintained, 85-95 ft.lbs. (115-128 Nm)

4.17 CARE AND CLEANING

Wash the tractor and implements after each use. Keep the equipment clean.

Note: *Do not wash any portion of the equipment while it is hot. Do not use high pressure spray or steam. Use cold water and automotive cleaners.*

1. Use compressed air to clean engine and radiator fins. A special blow gun is available through Textron Turf Care And Specialty Products Dealers.
2. Do not spray water directly at the instrument panel, ignition switch, controller or any other electrical components, or at bearing housings and seals.
3. Clean all plastic or rubber trim with a mild soap solution or use commercially available vinyl/rubber cleaners.

Repair damaged metal surfaces and use Textron Turf Care And Specialty Products touch-up paint. Wax the equipment for maximum paint protection.



CAUTION: *Clean grass and debris from cutting unit, drives, mufflers, and engine to prevent fires. Clean up oil or fuel spillage. Do not store tractor near open flame.*

WARNING

NEVER use your hands to clean cutting unit. Use a brush to remove grass clippings from blades. Blades are extremely sharp and can cause serious injuries.

Figure 4E

4.18 STORAGE

General

1. Wash the tractor thoroughly and lubricate. Repair and paint damaged or exposed metal.
2. Inspect the tractor, tighten all hardware, replace worn or damaged components.
3. Drain and refill radiator.
4. Clean the tires thoroughly and store the tractor so the load is off the tires. If tractor is not on jack stands, check tires at regular intervals and reinflate as necessary.
5. Keep the machine and all its accessories clean, dry and protected from the elements during storage. Never store equipment near an open flame or spark which could ignite fuel or fuel vapors.

Battery

1. Remove, clean and store battery in upright position in a cool, dry place.
2. Check and recharge battery every 60 to 90 days while in storage.
3. Store batteries in a cool, dry place. To reduce the self discharge rate, room temperature should not be above 80°F (27°C) or fall below 20°F (-7°C) to prevent electrolyte from freezing.

Engine

1. While the engine is warm, remove drain plug, drain the oil from the crankcase and change oil filter. Install drain plug and refill with fresh oil.
2. Clean exterior of engine. Paint exposed metal or apply a light coat of rust preventative oil.
3. **Diesel engines** - add a fuel conditioner or biocide to prevent gelling or bacterial growth in fuel. See your local fuel supplier.

Gasoline engines - For engine protection Textron Turf Care And Specialty Products recommends the use of a fuel additive such as STA-BIL®. Mix additive following instructions on container. Run engine for a short time to circulate additive through carburetor.

Remove spark plugs and pour 1 oz. (30 ml) of engine oil into each cylinders. Replace spark plugs and crank slowly (do not start) to distribute oil in cylinder.

If storing indoors, drain fuel from tank.

Note: Do not use fuel with ethanol during storage.

Cutting unit

1. Lubricate all fittings and friction points.
2. Wash the cutting unit thoroughly, then repair and paint any damaged or exposed metal.
3. On rotary type cutting units resharpen and balance the cutting blades. Apply a light coat of oil on blades to prevent rust.

After Storage

1. Check and reinstall battery
2. Check or service fuel filter and air cleaner.
3. Check the radiator coolant level.
4. Check oil level in the engine crankcase and hydraulic system.
5. Fill the fuel tank with fresh fuel. Bleed the fuel system.
6. Make certain that the tires are properly inflated.
7. Remove all oil from cutting blades. Readjust cutting height.
8. Start and operate the engine at 1/2 throttle. Allow enough time for the engine to become properly warmed and lubricated.

5 MAINTENANCE & LUBRICATION CHARTS

5.1 GENERAL



WARNING

Before you clean, adjust, or repair this equipment, disengage all drives, lower implements to the ground, engage parking brake, stop engine and remove key from ignition switch to prevent injuries.

1. Always clean grease fittings before and after lubrication.
2. Lubricate with grease that meets or exceeds NLGI Grade 2 LB specifications. Apply grease with a manual grease gun and fill slowly until grease begins to seep out. Do not use compressed air.
3. For smooth operation of pivot points and other friction points, apply several drops of SAE 30 oil every 50 hours or as required.

5.2 MAINTENANCE CHART

Recommended Service and Lubrication Intervals

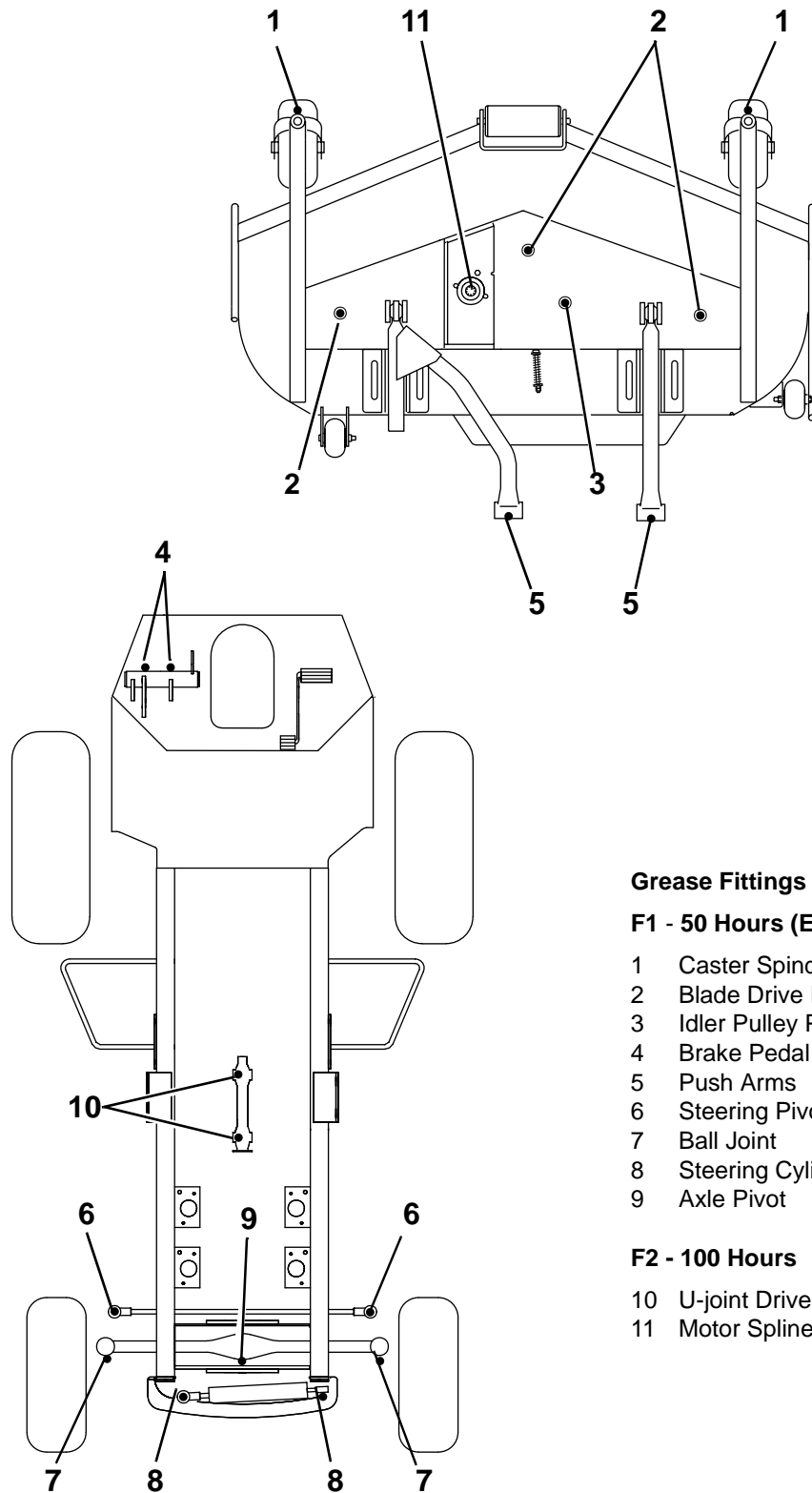
	Daily Before Starting	Every 50 Hours	Every 100 Hours	Every 200 Hours	Every 400 Hours	Every 500 Hours	Every 1000 Hours	Every 2 years	See Section	Lubricant Type
Air Cleaner Indicator	I								4.3	
Air Cleaner Element	R-AR								4.3	
Battery			I-C						4.6	
Coolant Fluid	I-A							R	4.13	
Engine Fan Belt		I*	I-A			R			3.7	
Engine Oil	I-A	R*		R					4.2	II
Engine Oil Filter		R*		R					4.2	
Fuel Lines and Clamps	I								4.5	
Fuel Filter					R				4.5	
Grease Fittings - F1		L							5.3	I
Grease Fittings - F2				L					5.3	I
Hydraulic Hoses and Tubes	I			I					4.9	
Hydraulic Oil	I-A					R			4.10	III
Hydraulic Oil Filters						R			4.10	
Muffler and Exhaust	I			I					4.12	
Parking Brake	I			I-A					3.5	
Radiator Screen	I-C								4.13	
Tires	I	I-A							4.15	
Wiring	I			I					4.11	

A - Add or Adjust C - Clean I - Inspect L - Lubricate R - Replace AR - As Required

* Indicates initial service for new machines.

- I Manual grease gun with NLGI Grade 2 (Service Class LB).
 II Engine Oil - See Section 2.3
 III Textron Turf Care And Specialty Products Hydraulic Oil - ISO 68

5.3 LUBRICATION CHART



Grease Fittings

F1 - 50 Hours (Every Week)

- 1 Caster Spindle
- 2 Blade Drive Pulleys
- 3 Idler Pulley Pivot
- 4 Brake Pedal Pivots
- 5 Push Arms
- 6 Steering Pivot
- 7 Ball Joint
- 8 Steering Cylinder
- 9 Axle Pivot

F2 - 100 Hours

- 10 U-joint Driveshaft
- 11 Motor Spline

6 TROUBLESHOOTING

6.1 GENERAL TROUBLESHOOTING

The troubleshooting chart below lists basic problems that may occur during start-up and operation. For more detailed information regarding the hydraulic and electrical systems contact your area Textron Turf Care And Specialty Products Dealer.

Symptoms	Possible Causes	Action
Engine will not start.	<ol style="list-style-type: none"> 1. Parking brake disengaged or power take-off switch on. 2. Engine cold. 3. Battery low on charge or defective. 4. Fuel tank empty or dirty. 5. Fuse blown. 6. Relay defective 7. Traction pedal not in neutral. 8. Neutral switch on traction pedal out of adjustment or defective. 	<ol style="list-style-type: none"> 1. Check operator back-up system and start-up procedure. 2. Use glow plugs or choke. 3. Inspect condition of battery and battery connections. 4. Fill with fresh fuel. Change fuel filter. Bleed fuel lines. 5. Replace fuse. 6. Test and replace relay. 7. Check position of pedal. 8. Adjust or replace switch.
Engine hard to start or runs poorly.	<ol style="list-style-type: none"> 1. Fuel level low, fuel or fuel filter dirty. 2. Air cleaner dirty. 3. Injectors, fuel pump 4. Engine problem. 	<ol style="list-style-type: none"> 1. Fill with fresh fuel. Change fuel filter. Bleed fuel lines. 2. Inspect and replace air filter. 3. Consult engine manual. 4. Consult engine manual
Engine stops.	<ol style="list-style-type: none"> 1. Fuel tank empty. 2. Interlocks not set before leaving operator's seat. 	<ol style="list-style-type: none"> 1. Fill with fresh fuel and bleed fuel lines. 2. Engage parking brake and disengage power take-off.
Engine overheating.	<ol style="list-style-type: none"> 1. Coolant level low. 2. Air intake restricted. 3. Water pump belt broken or loose. 	<ol style="list-style-type: none"> 1. Inspect and add coolant. 2. Clean air intake screen and radiator. 3. Tighten or replace belt.
Battery not holding charge. Battery light on.	<ol style="list-style-type: none"> 1. Loose or corroded battery terminals. 2. Low electrolyte. 3. Alternator belt loose or broken 4. Charging system defective. 	<ol style="list-style-type: none"> 1. Inspect and clean terminals 2. Refill to correct level. 3. Tighten or replace belt 4. See engine manual
Cutting unit not cutting evenly.	<ol style="list-style-type: none"> 1. Cutting height not set correctly 2. Engine speed too low. 3. Mow speed not adjusted for turf conditions. 4. Air pressure in caster tires not adjusted correctly. 5. Lift lever not set correctly. 	<ol style="list-style-type: none"> 1. Check and adjust cutting height. 2. Check engine speed. Run engine at full throttle. 3. Adjust speed limiter for best cut. 4. Check tires and adjust evenly to correct pressure. 5. Set lift lever to 'float'.

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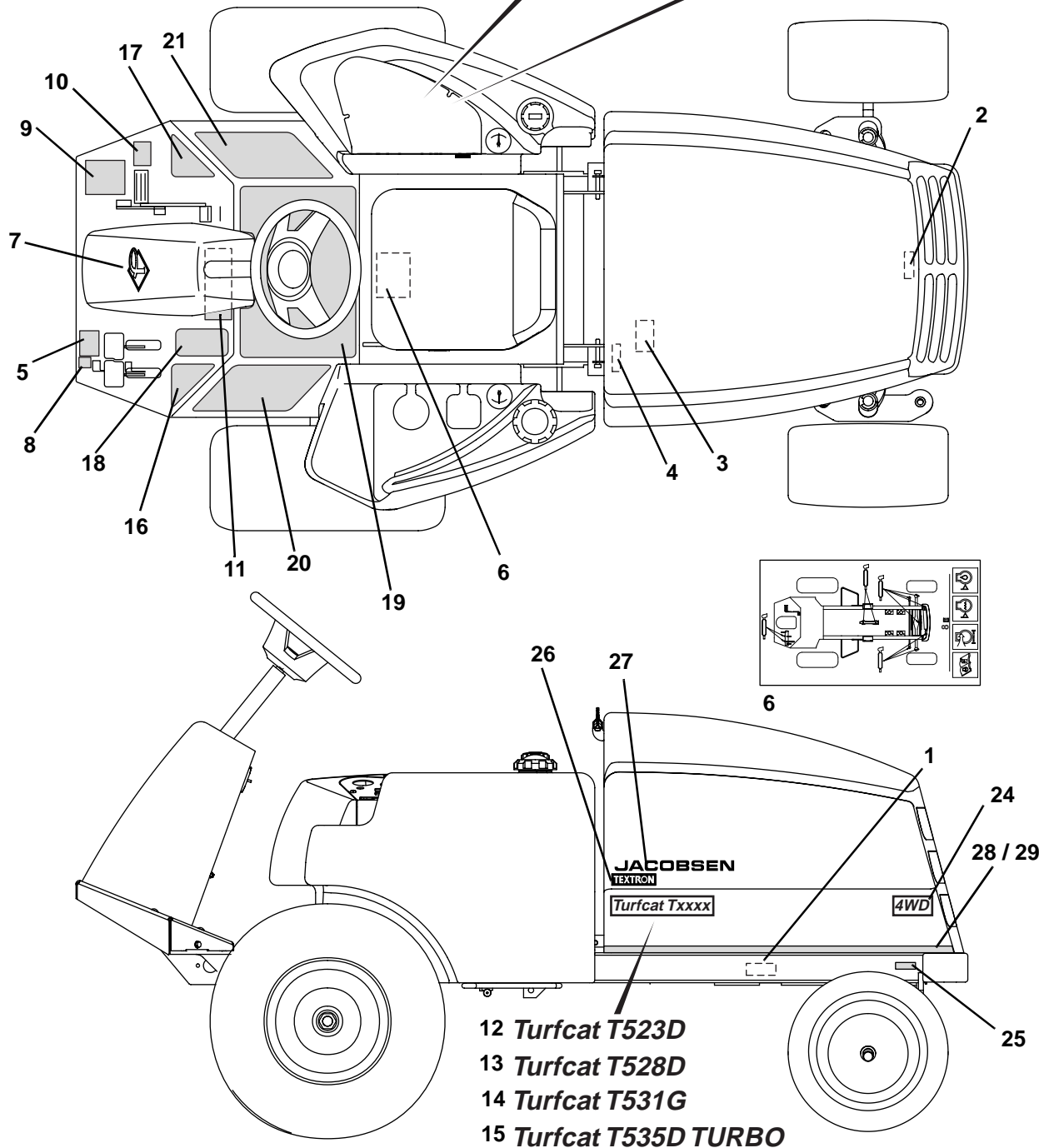
1.1 Decals

OPERATING INSTRUCTIONS			
READ MANUAL THOROUGHLY FOR OPERATING AND SAFETY INSTRUCTIONS. REPLACEMENT MANUAL AVAILABLE FROM: JACOBSEN/TEXTRON, RACINE, WI.			
TO START	TO DRIVE	TO USE IMPLEMENT	TO STOP
1. Set Parking Brake. 2. Set Speed Control treads in neutral. 3. Place pto switch in off position. 4. Set throttle at half position. 5. For cold starting, hold glow switch for max. five seconds, release switch. 6. Turn ignition switch to start position.	1. Release parking brake. 2. Set throttle to fast position. 3. Depress treads pedal for desired ground speed.	1. Lower implement to ground. 2. Place pto switch in on position. 3. Depress treads pedal for desired ground speed.	1. Set treads pedal in neutral position. 2. Place pto switch in off position. 3. Set parking brake. 4. Set throttle to slow position. 5. Turn ignition to off position and remove key.

11

22

23



IMPORTANT
DO NOT USE STARTING
ASSIST FLUIDS

USE OF STARTING ASSIST FLUIDS IN THE AIR INTAKE SYSTEM MAY BE POTENTIALLY EXPLOSIVE OR CAUSE A "RUNAWAY" ENGINE CONDITION. THIS COULD RESULT IN SERIOUS ENGINE DAMAGE.

1

DANGER

To avoid injury when working with battery

1. Always connect the black ground (-) cable last and remove it first.
2. Keep sparks and flames away, and avoid contact with acid.

To avoid injury when jumping battery

1. Connect positive (+) terminal to positive (+) terminal.
2. Connect negative (-) terminal on good battery to frame of vehicle that has dead battery.

2

THIS RADIATOR CONTAINS
ANTI-FREEZE
PROTECTED TO -26°F (-32°C)

Mix equal parts of clean water and a premium quality ethylene glycol based anti-freeze to maintain the boil over, rust and corrosion protection.

Drain and discard coolant yearly. Read manual for additional instructions.

3

WARNING

Radiator is under pressure. Remove cap slowly to avoid personal injury

4

PRECAUCION

1. No opere esta maquina sin previo entrenamiento, instruccion y sin haber leído el manual de operacion.
2. Tenga todas las guardas en su lugar y piezas bien aseguradas.
3. Neutralice todas las velocidades y apague el motor antes de vaciar los recolectores de pasto, darle servicio, limpiar, ajustar y destrabar la maquina.
4. Mantenga las manos, los pies y ropa suelta lejos de piezas en movimiento.
5. No deberan transportar pasajeros si no existe un asiento para ellos.
6. Si no sabe leer ingles, pida que alguien le lea las calcomanias de avisos y los manuales de instruccion y operacion.

5



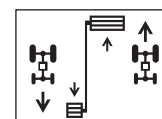
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WARNING

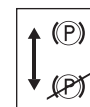
- Read operators manual. Do not allow untrained operators to use machine.
- Keep shields in place and hardware securely fastened.
- Before you clean, adjust or repair this equipment, disengage all drives, engage parking brake and stop engine.
- Keep hands, feet and clothing away from moving parts.
- Never carry passengers.
- Keep bystanders away.
- Do not use on slopes greater than 19°.

Model	Engine power	Vehicle mass with deck
T525D	35hp (25.1 kW)	2000 lbs. (907kg)
T528D	38hp (27.3 kW)	2000 lbs. (907kg)
T531G	31hp (22.1 kW)	2000 lbs. (907kg)
T535D	35hp (25.1 kW)	2000 lbs. (907kg)

9



8

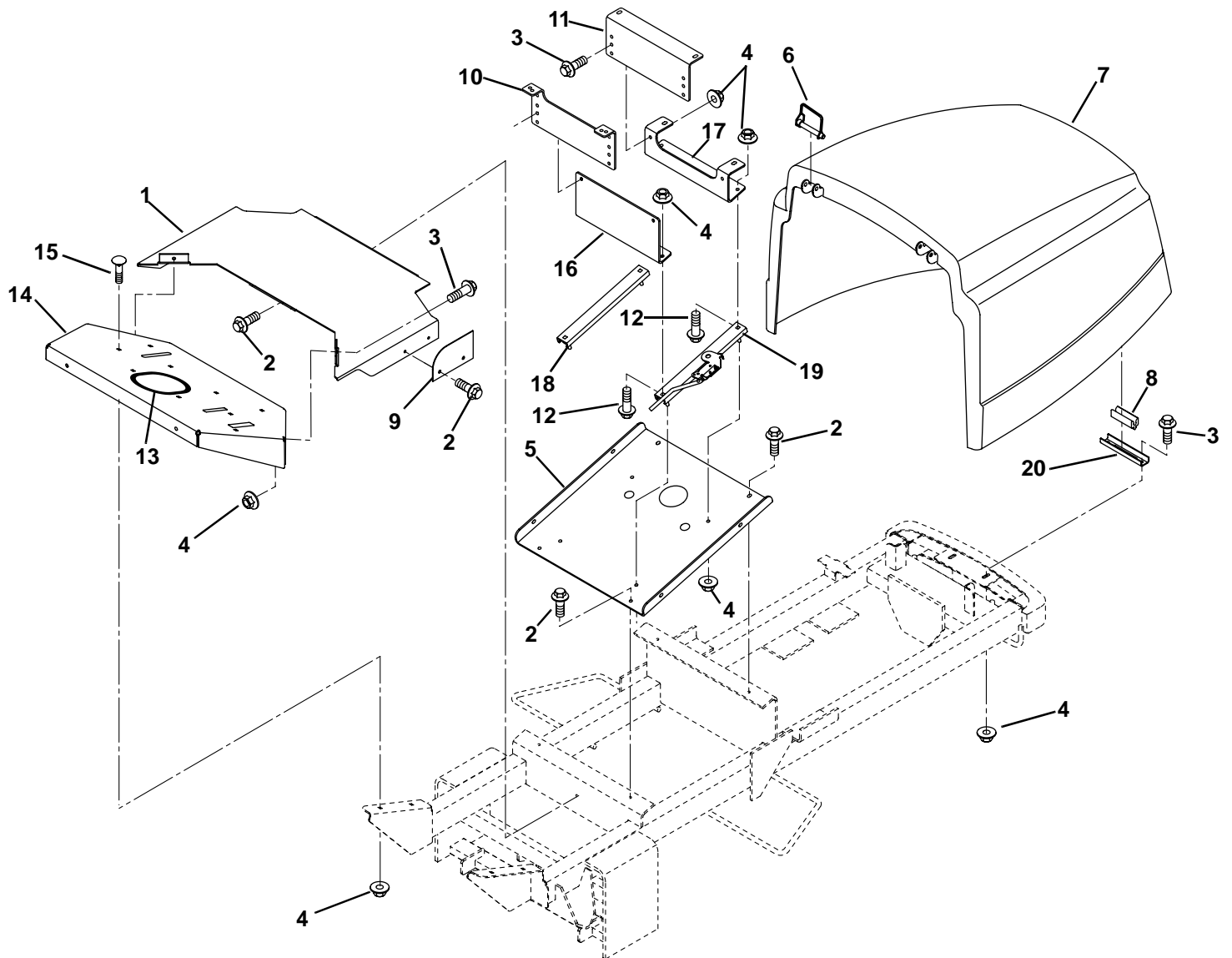


10

TC500-15

Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	3000435	1	Decal, Starting Fluids	
2	3001435	1	Decal, Battery Danger	
3	363995	1	Decal, Anti-Freeze	
4	365956	1	Decal, Radiator Warning	
5	340623	1	Decal, Spanish Caution	
6	3009387	1	Decal, Service	
7	3007129	1	Emblem, Diamond J	
8	3008004	1	Decal, Brake	
9	3008001	1	Decal, Warning	
10	3008521	1	Decal, Traction Pedal	
11	3008580	1	Decal, Instruction	Gas Units Only
11	3008003	1	Decal, Instruction	Diesel Units Only
12	3008664	1	Decal, Turfcats T523D	23 hp Units Only
13	3008665	1	Decal, Turfcats T528D	28 hp Units Only
14	3008667	1	Decal, Turfcats T531G	31 hp Units Only
15	3008666	1	Decal, Turfcats T535D	35 hp Units Only
16	3006516	1	Pad, L.H. Platform	
17	3006517	1	Pad, R.H. Platform	
18	3006515	1	Pad, Center Platform	
19	3006512	1	Pad, Center Floorboard	
20	3006513	1	Pad, L.H. Floorboard	
21	3006514	1	Pad, R.H. Floorboard	
22	3008755	1	Decal, Instrument Panel	Gas Units Only
23	3006350	1	Decal, Instrument Panel	Diesel Units Only
24	3008330	2	Decal, 4WD	4WD Units Only
25	REF	1	Serial Plate	
26	3007513	2	Decal, Textron	Included with Hood
27	3007504	2	Decal, Jacobsen	Included with Hood
28	3008740	1	Decal, L.H. Stripe	Included with Hood
29	3008741	1	Decal, R.H. Stripe	Included with Hood

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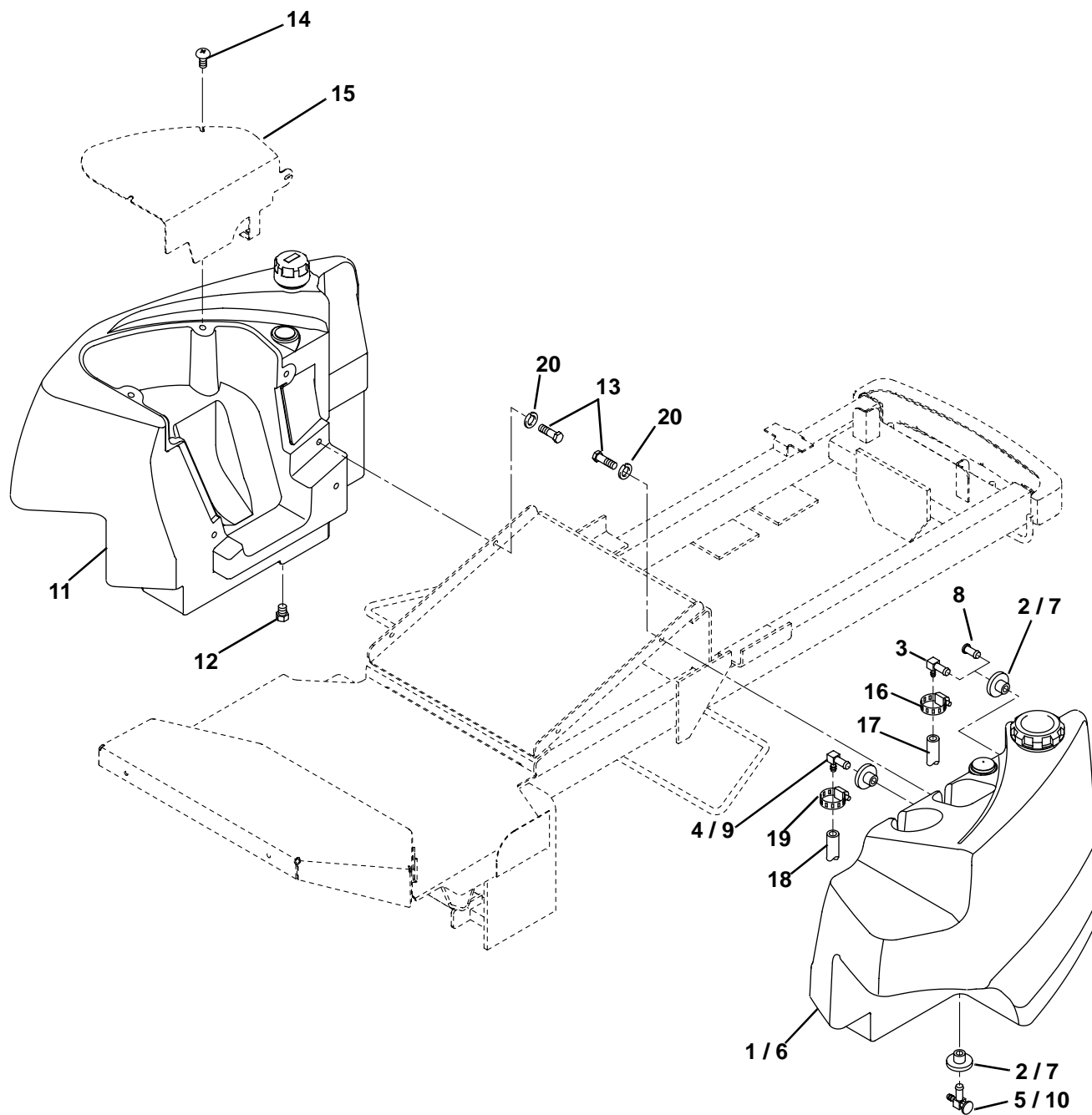


TURFCAT 500 SERIES

Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	3005638	1	Floorboard	Includes Decals
2	409812	7	Screw, 5/16-18 x 3/4" Thread Cut	
3	403770	8	Screw, 5/16-18 x 3/4" Hex Flange	
4	445781	16	Nut, 5/16-18 Whiz-Lock	
5	5003377	1	Seat Pan	
6	3007798	2	Lock Pin	
7	1004943	1	Hood Assembly	
8	3006571	1	Extrusion, Hood Closure	
9	3009664	1	Shield, Foot	
10	3008826	1	Bracket, Front Seat	
11	3008827	1	Bracket, Rear Seat	
12	3001328	4	Screw, 5/16-18 x 5/8" Thread Cut	
13	557260	AR	Molding (Cut to 9 in.)	
14	5003376	1	Platform	
15	441602	4	Carriage Bolt, 5/16-18 x 3/4"	
16	3008824	1	Bracket, Seat Front	
17	3008825	1	Bracket, Seat Rear	
18	3006988	1	Adjuster, Slave	
19	3009995	1	Adjuster, Latching	
20	3006572	1	Channel, Mounting	

> Change from previous revision

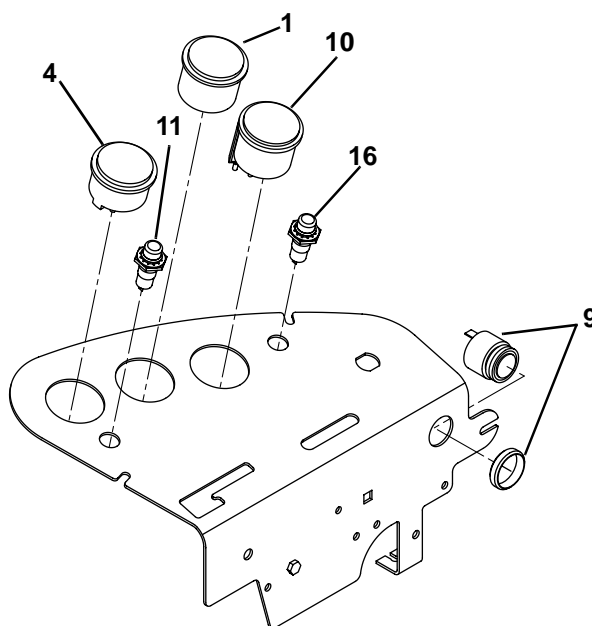
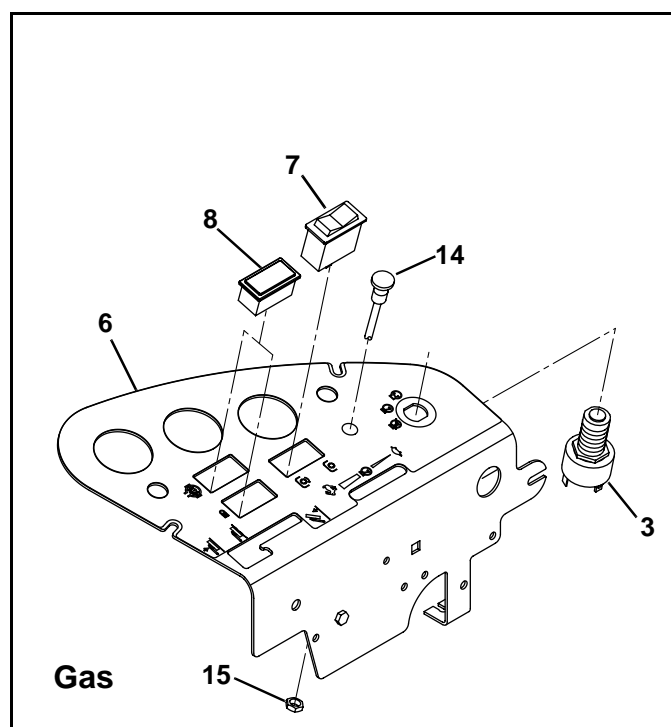
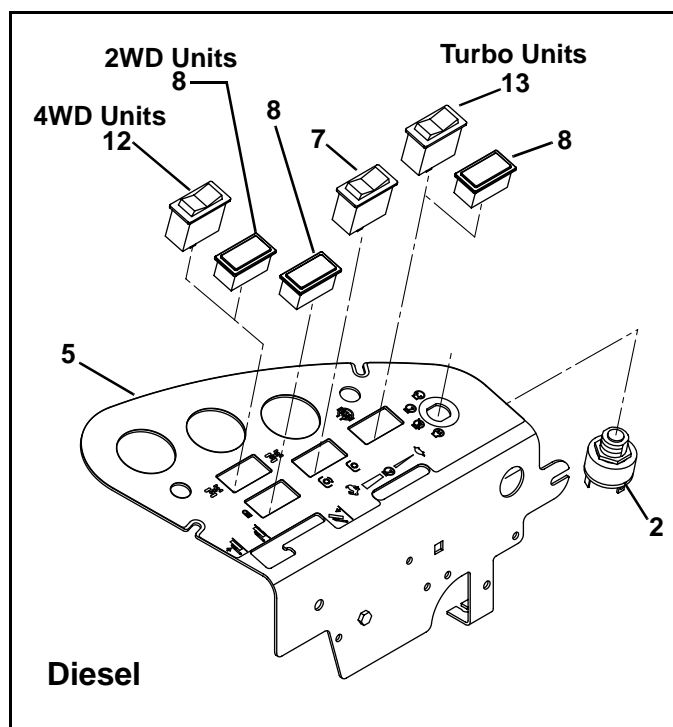
3.1 Tanks



Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	N/S	1	Fuel Tank Assembly, Diesel	Diesel Units Only
	1004265	1	• Fuel Tank	
	3007111	1	• • Drop Tube	
	350677	1	• • O-Ring	
	3006067	1	• Cap, Diesel Fuel	
	3005996	1	• Float, Fuel Level	
	5000869	1	• • Bushing	
2	361117	3	• Bushing	
3	361748	1	• Valve, Overflow	
4	3003704	1	• Elbow, Fuel	
5	132647	1	• Valve, Shutoff	Gas Units Only
6	N/S	1	Fuel Tank Assembly, Gas	
	1004265	1	• Fuel Tank	
	3007111	1	• • Drop Tube	
	350677	1	• • O-Ring	
	3006376	1	• Cap, Fuel	
	3005996	1	• Float, Fuel Level	
	5000869	1	• • Bushing	
7	361117	3	• Bushing	
8	3000464	1	• Plug, Fuel Tank	
9	3003704	1	• Elbow, Fuel	
10	132647	1	• Valve, Shutoff	
11	N/S	1	Hydraulic Reservoir Assembly	
	1002539	1	• Hydraulic Tank	
	3008809	1	• Cap, Filler/Breather	
	3005997	1	• Float, Oil Lever	
	5000869	1	• • Bushing	
12	351127	1	• Plug	
13	400182	4	Screw, 5/16-18 x 5/8" Hex Head	
14	404016	3	Screw, 1/4-20 x 5/8" Truss Head	
15	—	1	Instrument Panel	See 4.1
16	366526	1	Clamp, Hose	Diesel Units Only
17	554752	70"	Fuel Line (Engine Return to Tank)	Diesel Units Only
18	554748	21"	Fuel Line (Tank to Fuel Filter)	Gas Units Only
18	554748	15"	Fuel Line (Tank To Fuel Pump)	Diesel Units Only
19	359611	1	Clamp, Hose	
20	446136	4	Lockwasher, 5/16 Heavy	

> Change from previous revision

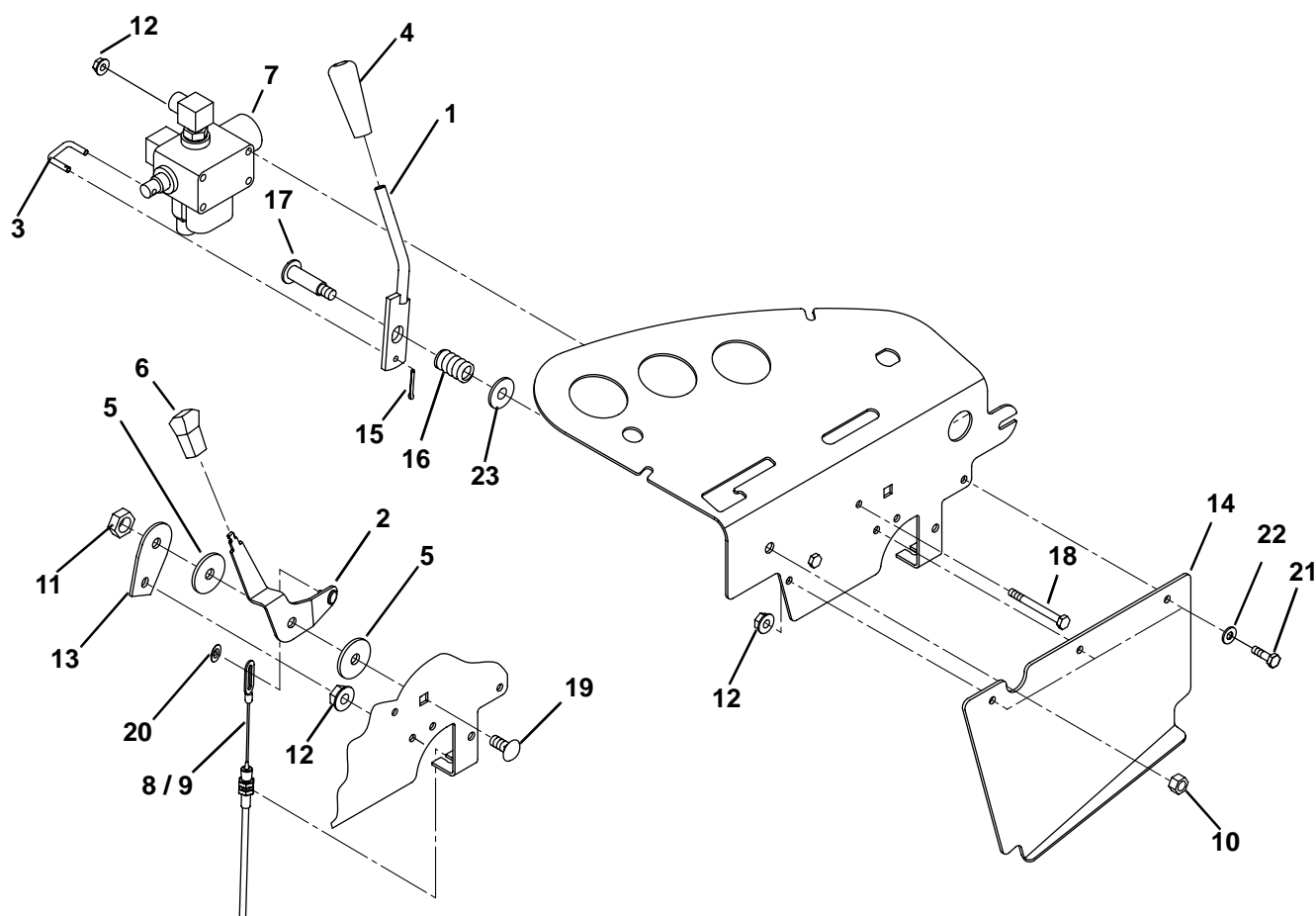
4.1 Instrument Panel



TURFCAT 500 SERIES

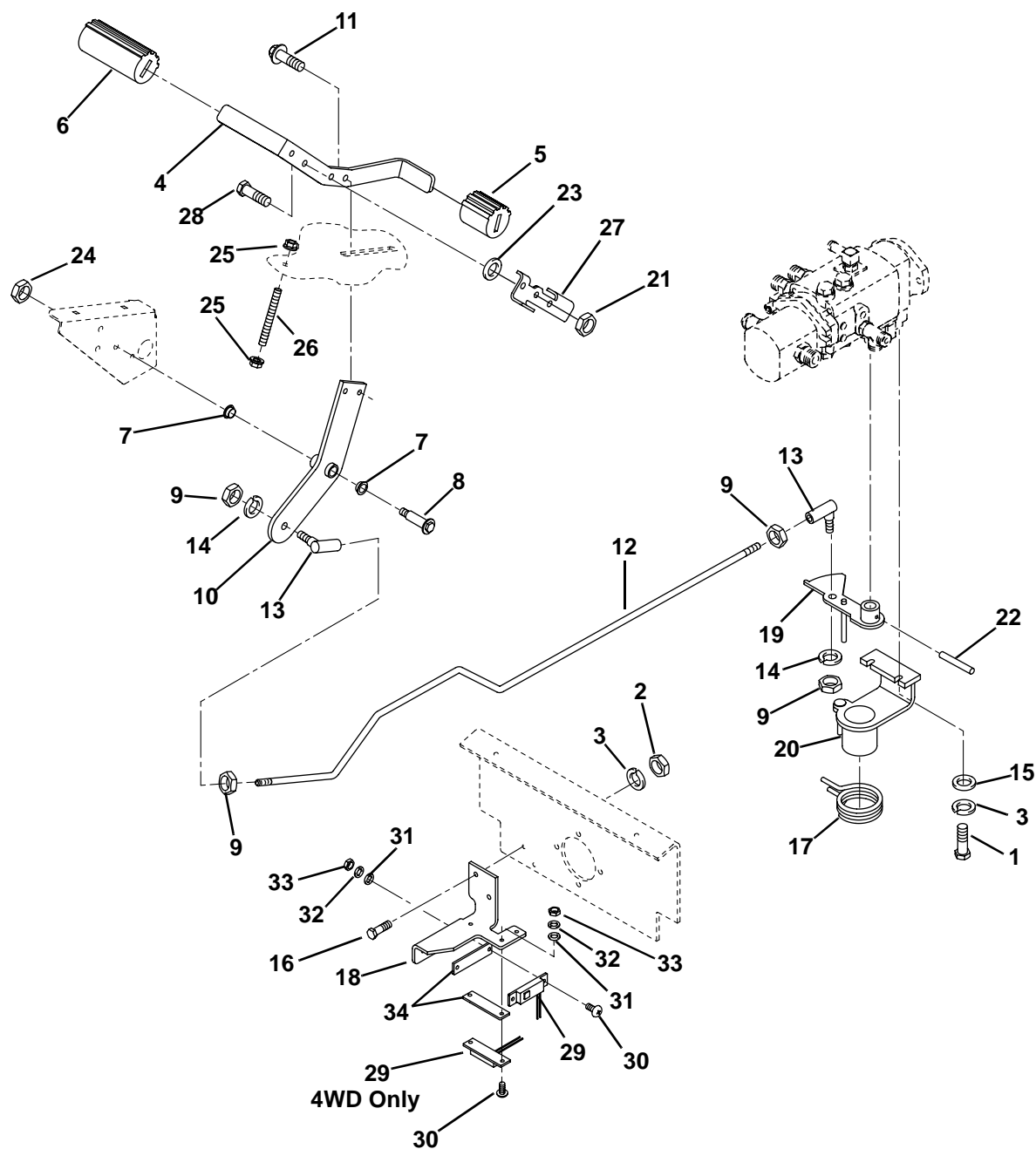
Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	162720	1	Gauge, Water Temp	
	447002	3	• Lockwasher, #6 External Tooth	
	444302	3	• Nut, #6-32 Hex	
	447206	2	• Lockwasher, #8 Internal Tooth	
	444306	2	• Nut, #8-32 Hex	
2	1003416	1	Switch, Ignition	Diesel Units Only
	5003055	1	• Key, Ignition	
3	5003765	1	Switch, Ignition	Gas Units Only
	558015	1	• Key, Ignition	
	558037	2	• Nut, 13/16-20 Black Nylon Face	
4	162723	1	Gauge, Hour Meter	
	447002	1	• Lockwasher, #10	
	444310	1	• Nut, #10	
5	3010617	1	Panel, Control	Diesel Units Only
6	3010618	1	Panel, Control	Gas Units Only
7	3006440	1	Switch, PTO	
8	3006509	AR	Hole, Plug	
9	366670	1	Horn	
10	162721	1	Gauge, Voltmeter	
	447002	3	• Lockwasher, #6 External Tooth	
	444302	3	• Nut, #6-32 Hex	
	447206	2	• Lockwasher, #8 Internal Tooth	
	444306	2	• Nut, #8-32 Hex	
11	164194	1	Light, Oil Indicator	
12	3006436	1	Switch, 4WD	4WD Units Only
13	3006441	1	Switch, Cruise Control	Turbo Units Only
14	337713	1	Cable, Choke	Gas Units Only
15	443112	1	Nut, 3/8-24 Hex	Gas Units Only
16	366751	1	Light, Yellow Indicator	

> Change from previous revision



Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	1002676	1	Lift Lever	See 32.1 Diesel Units Only Gas Units Only
2	1002677	1	Throttle Lever	
3	3006045	1	Lift Link	
4	3007643	1	Knob	
5	360885	2	Washer, Friction	
6	366768	1	Knob	
7	—	1	Valve, Deck Lift	
8	1002858	1	Throttle Cable	
9	1003991	1	Thottle Cable	
10	444744	1	Locknut, 3/8-24 Center	
11	444850	1	Locknut, 3/8-16 Hex Jam	
12	445784	5	Nut, 1/4-20 Hex Whiz-Lock	
13	3009153	1	Plate, Friction	
14	3006054	1	Cover, Tank	
15	460002	1	Cotter Pin, 1/16 x 1/2"	
16	351417	1	Spring, Compression	
17	352901	1	Bolt, 3/8-24 Shoulder	
18	400124	2	Screw, 1/4-20 x 2-1/2" Hex Head	
19	440116	1	Carriage Bolt, 3/8-16 x 7/8"	
20	445800	1	Push Nut	
21	400110	3	Screw, 1/4-20 x 7/8" Hex Head	
22	453023	3	Flatwasher, 1/4	
23	310711	1	Washer	

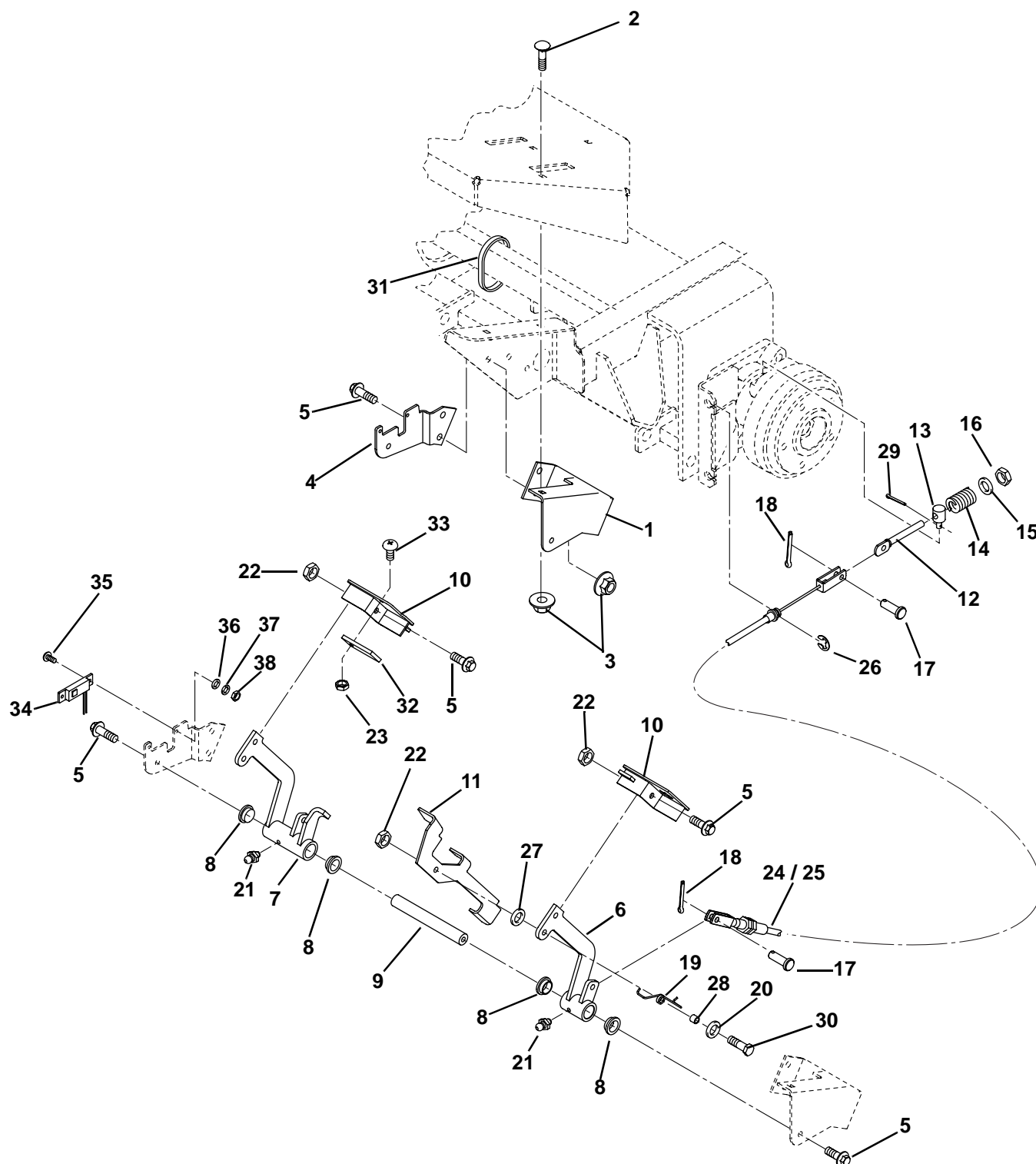
5.1 Accelerator Pedal



TURFCAT 500 SERIES

Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	400118	2	Screw, 1/4-20 x 1-3/4" Hex Head	
2	443102	2	Nut, 1/4-20 Hex	
3	446128	4	Lockwasher, 1/4	
4	3007001	1	Pedal, Hydro	
5	3003474	1	Grip, Pedal	
6	3003475	1	Grip, Pedal	
7	366877	2	Bearing, Nylon	
8	352901	1	Shoulder Bolt, 3/8-24	
9	443112	4	Nut, 3/8-24 Hex	
10	1003015	1	Arm, Pedal	
11	409812	2	Screw, 5/16-18 x 3/4" Thread Cut	
12	3008866	1	Rod, Hydro	
13	310089	2	Joint	
14	446142	2	Lockwasher, 3/8 Heavy	
15	453023	2	Flat Washer, 1/4	
16	400110	2	Screw, 1/4-20 x 7/8" Hex Head	
17	3009355	1	Spring, Torsion	
18	3007482	1	Bracket, Switch	
19	1004335	1	Arm, Return	
20	1004342	1	Base	
21	444718	1	Locknut, 5/16-18 Center	
22	461383	1	Roll Pin, 3/16 x 1"	
23	3002695	1	Washer, Special	
24	444744	1	Locknut, 3/8-24 Center	
25	445796	2	Nut, 3/8-16 Spiralock Flange	
26	333542	1	Tie Stud	
27	3007230	1	Stop, Mow Speed	
28	400188	1	Screw, 5/16-18 x 1" Hex Head	
29	3007392	1	Switch, Proximity	2WD Units Only
29	3007392	2	Switch, Proximity	4WD Units Only
30	403860	AR	Screw, #8-32 x 5/8" Truss Head	
31	453004	AR	Flat Washer, #8	
32	446110	AR	Lockwasher, #8	
33	444306	AR	Nut, #8-32 Hex	
34	3009193	AR	Shim	4WD Units Only

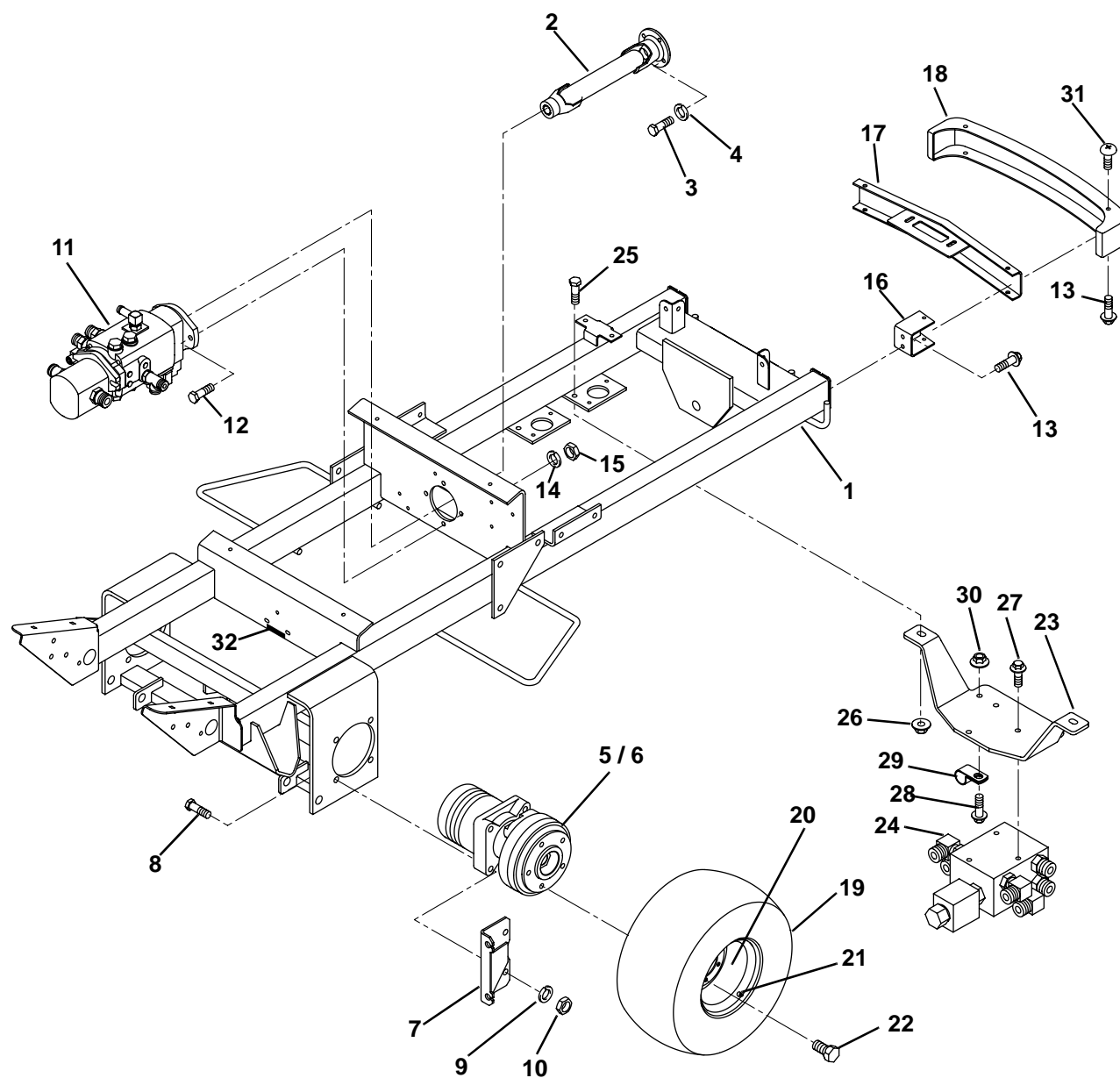
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Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	3006325	1	Bracket, L.H. Turn Assist	
2	441602	1	Carriage Bolt, 5/16-18 x 3/4"	
3	445781	3	Nut, 5/16-18 Whiz-Lock	
4	3006335	1	Bracket, R.H. Turn Assist	
5	403770	6	Screw, 5/16-18 x 3/4" Hex Flange	
6	1004437	1	L.H. Turn Assist	
7	1004438	1	R.H. Turn Assist	
8	352726	4	• Bushing	
9	3006327	1	Shaft, Turn Assist	
10	1002984	2	Pedal, Turn Assist	
11	3006482	1	Lever, Parking Brake	
	1003240	2	Pin, Brake Assembly	
12	3006871	1	• Pin, Brake	
13	3007796	1	• Guide, Brake	
14	3005959	1	• Spring, Compression	
15	453011	1	• Flat Washer, 3/8	
16	445780	1	• Locknut, 3/8-24 Center	
17	461451	4	Clevis Pin, 5/16 x 15/16"	
18	460012	4	Cotter Pin, 3/32 x 5/8"	
19	3007942	1	Spring, Torsion	
20	453009	1	FLat Washer, 5/16	
21	471214	2	Fitting, Grease	
22	444718	3	Locknut, 5/16-18 Center	
23	444708	1	Locknut, 1/4-20 Center	
24	1002689	1	Cable, L.H. Brake	
25	1002688	1	Cable, R.H. Brake	
26	557771	2	• Clip, Retaining	
27	3002695	1	Washer, Special	
28	3007941	1	Spacer	
29	460026	2	Cotter Pin, 1/8 x 3/4"	
30	400190	1	Screw, 5/16-18 x 1-1/4" Hex Head	
31	473164	2	Cable Tie	
32	3009716	1	Bar, Brake Link	
33	404016	1	Screw, 1/4-20 x 5/8" Truss Head	
34	3007392	1	Switch, Proximity	
35	403680	2	Screw, #8-32 x 5/8" Truss Head	
36	453004	2	Flat Washer, #8	
37	446110	2	Lockwasher, #8	
38	444306	2	Nut, #8-32 Hex	

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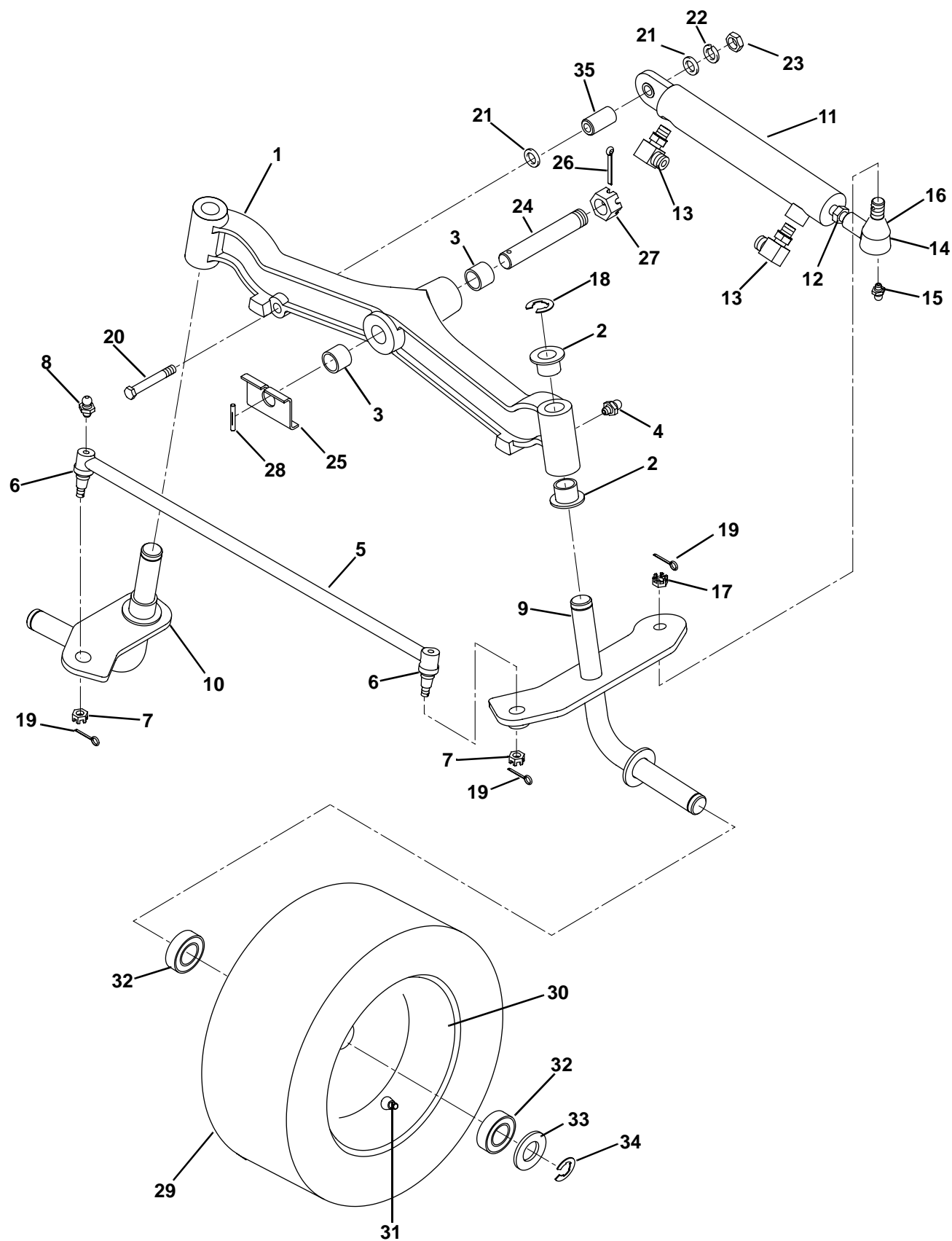
7.1 Frame



Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	1002537	1	Frame	
2	3007088	1	Drive Shaft	Diesel Units Only
2	3008475	1	Drive Shaft	Gas Units Only
	554663	1	• Cross and Bearing Kit	All Units
3	3002042	3	Screw, M10-1.25 x 22 MM Hex Head	Diesel Units Only
3	361005	4	Screw, M8-1.25 x 25 MM Hex Head	Gas Units Only
4	363485	AR	Lockwasher, M10 Heavy	
5	—	1	Wheel Motor Assembly, L.H.	See 31.1
6	—	1	Wheel Motor Assembly, R.H.	See 31.1
7	1003755	2	Bracket, Welded	
8	400428	8	Screw, 1/2-13 x 2-3/4" Hex Head	
9	446154	8	Lockwasher, 1/2 Heavy	
10	443118	8	Nut, 1/2-13 Hex	
11	—	1	Pump Assembly	See 30.1
12	400266	2	Screw, 3/8-16 x 1-1/2" Hex Head	
13	409812	6	Screw, 5/16-18 x 3/4" Thread Cut	
14	446142	2	Lockwasher, 3/8 Heavy	
15	443110	2	Nut, 3/8-16 Hex	
16	1004245	2	Mount, Bumper	
17	1003536	1	Channel, Bumper	
18	3005927	1	Bumper	
19	5000400	2	Tire	
20	5002894	2	Wheel	
21	360111	2	Inflation Valve	
22	315298	10	Wheel Bolt	
23	3008743	1	Bracket, Valve Mounting	4WD Units Only
24	—	1	4WD Valve	4WD Units Only, See 35.1
25	400262	2	Screw, 3/8-16 x 1" Hex Head	4WD Units Only
26	445783	2	Nut, 3/8-16 Whiz-Lock Large Flange	4WD Units Only
27	403751	3	Screw, 5/16-18 x 3/4" Serr Washer	4WD Units Only
28	403770	1	Screw, 5/16-18 x 3/4" Hex Flange	4WD Units Only
29	354080	1	Clamp	4WD Units Only
30	445781	1	Nut, 5/16-18 Whiz-Lock	4WD Units Only
31	409863	2	Screw, 5/16-18 x 1" Thread Cut	
32	557260	5"	Molding	

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8.1 2WD Steering

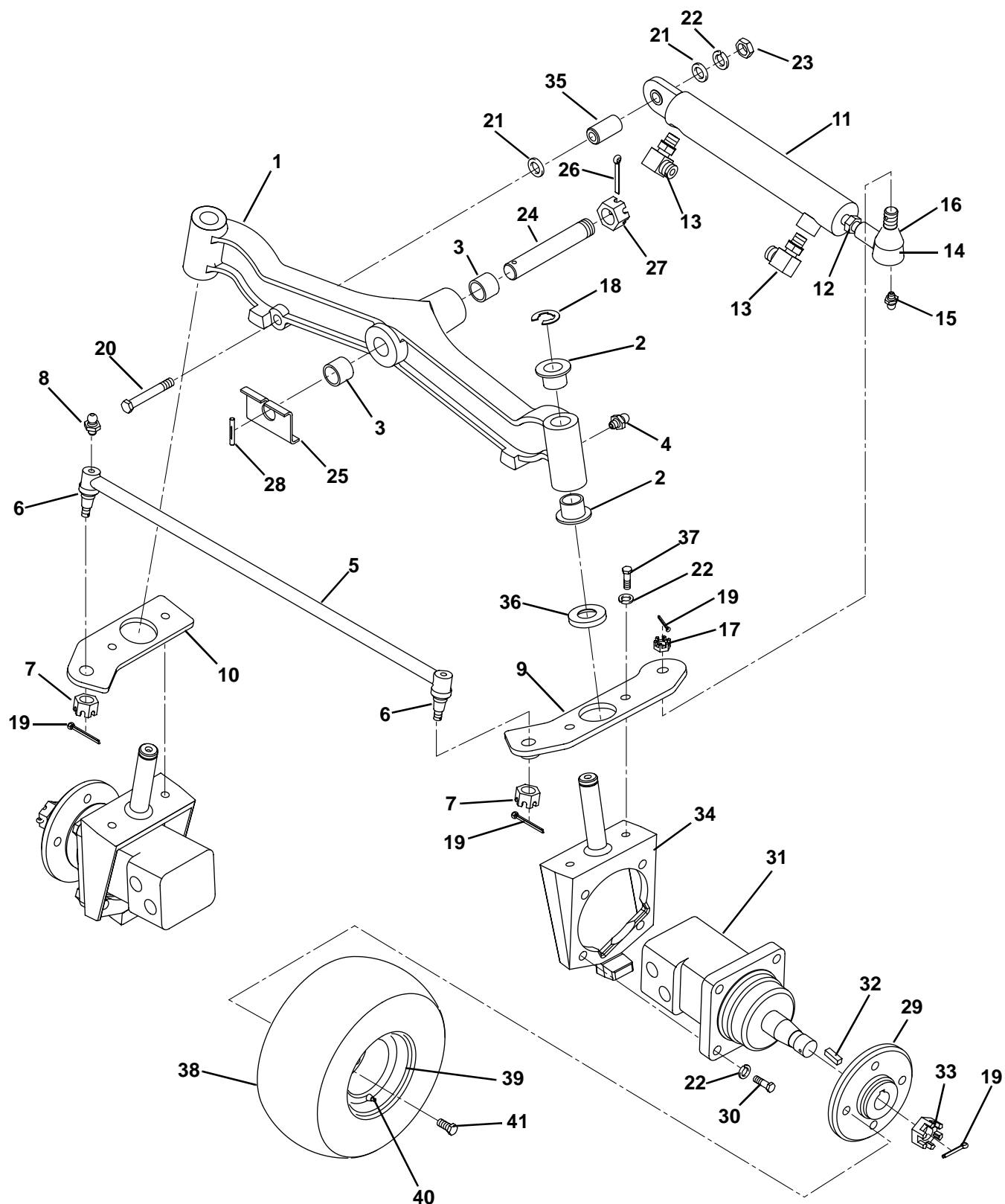


TURFCAT 500 SERIES

Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	1003027	1	Axle, Steering	Used on Gold Star Cylinders Only Used on HDM Cylinders Only
2	346149	4	• Bushing	
3	319867	2	• Bushing	
4	471226	3	• Grease Fitting	
5	3005499	1	Tie Rod	
6	322843	2	• Dust Cover	
7	445666	2	• Nut, 1/2-20 Slotted Hex	
8	N/S	2	• Grease Fitting	
9	1002544	1	Steering Arm, L.H.	
10	1002545	1	Steering Arm, R.H.	
11	3005593	1	Steering Cylinder	
	5003206	1	• Seal Kit - Gold Star	
	5003658	1	• Seal Kit - HDM	
12	443820	1	• Nut, 1/2-20 Hex Jam	
13	340057	1	• Adapter, 90°	
14	3006259	1	• Ball Joint	
15	471214	1	• • Grease Fitting	
16	322843	1	• • Dust Cover	
17	5003058	1	• • Nut, 9/16-18 Slotted Hex	
18	458008	2	External, Snap Ring	
19	460030	3	Cotter Pin, 1/8 x 1-1/4"	
20	400424	1	Screw, 1/2-13 x 4-1/2" Hex Head	
21	453017	2	Flat Washer, 1/2	
22	446154	1	Lockwasher, 1/2 Heavy	
23	443118	1	Nut, 1/2-13 Hex	
24	3005667	1	Shaft, Axle Mounting	
25	3005668	1	Plate, Axle Mount	
26	460068	1	Cotter Pin, 1/4 x 2"	
27	445710	1	Nut, 1-14 Slotted Hex	
28	461202	1	Groove Pin, 1/4 x 1-3/4"	
29	550337	2	Tire	
30	5002728	2	Wheel	
31	360111	2	Valve, Inflation	
32	5002949	4	Ball Bearing, Double Seal	
33	455004	2	Washer, 1"	
34	458008	2	Retaining Ring	
35	3009887	1	Spacer	

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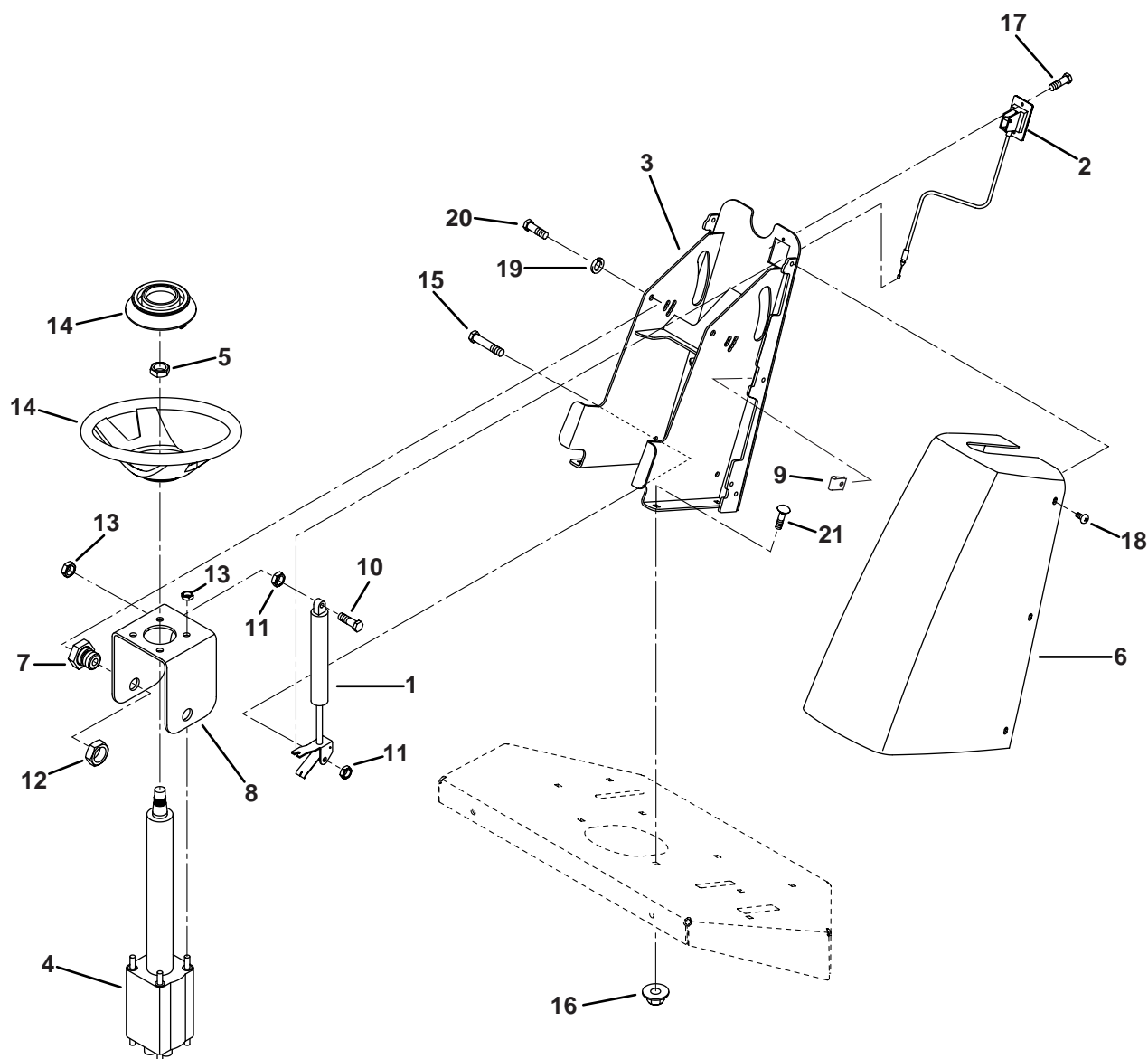
9.1 4WD Steering



Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	1003027	1	Axle, Steering	Used on Gold Star Cylinders Only Used on HDM Cylinders Only
2	3005596	4	• Bushing	
3	319867	2	• Bushing	
4	471226	3	• Grease Fitting	
5	3005499	1	Tie Rod	
6	322843	2	• Dust Cover	
7	445666	2	• Nut, 1/2-20 Slotted Hex	
8	N/S	2	• Grease Fitting	
9	1002542	1	Steering Arm, L.H.	
10	1002543	1	Steering Arm, R.H.	
11	3005593	1	Steering Cylinder	
	5003206	1	• Seal Kit - Gold Star	
	5003658	1	• Seal Kit - HDM	
12	443820	1	• Nut, 1/2-20 Hex Jam	
13	340057	1	• Adapter, 90°	
14	3006259	1	• Ball Joint	
15	471214	1	• • Grease Fitting	
16	322843	1	• • Dust Cover	
17	5003058	1	• • Nut, 9/16-18 Slotted Hex	
18	458008	4	External, Snap Ring	
19	460030	5	Cotter Pin, 1/8 x 1-1/4"	
20	400424	1	Screw, 1/2-13 x 4-1/2" Hex Head	
21	453017	2	Flat Washer, 1/2	
22	446154	13	Lockwasher, 1/2 Heavy	
23	443118	1	Nut, 1/2-13 Hex	
24	3005667	1	Shaft, Axle Mounting	
25	3005668	1	Plate, Axle Mount	
26	460068	1	Cotter Pin, 1/4 x 2"	
27	445710	1	Nut, 1-14 Slotted Hex	
28	461202	1	Groove Pin, 1/4 x 1-3/4"	
29	220299	2	Hub, Wheel	
30	400408	8	Screw, 1/2-13 x 1-1/2" Hex Head	
31	395325	2	Wheel Motor	See 36.1
32	554780	2	Key	
33	554779	2	Nut	
34	2000129	2	Motor Mount	
35	3009887	1	Spacer	
36	3006255	2	Spacer, Motor Support	
37	400404	4	Screw, 1/2-13 x 1" Hex Head	
38	550337	2	Tire	
39	5002895	2	Wheel	
40	360111	2	Valve, Inflation	
41	353914	8	Wheel Bolt	

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10.1 Tilt Steering



Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	5002918	1	Actuator, Gas Spring	See 38.1
2	5002919	1	Cable, Actuator	
3	2811346	1	Tower, Steering	
4	1004704	1	Valve, Steering	
5	443828	1	• Nut, 5/8-18 Hex Jam	
6	3010651	1	Cover, Steering Tower	
7	3005934	2	Bolt, Shoulder	
8	3005981	1	Bracket, Steering Pump	
9	445245	6	Tinnerman Nut	
10	400192	1	Screw, 5/16-18 x 1-1/2" Hex Head	
11	444718	3	Locknut, 5/16-18 Center	
12	444849	2	Locknut, 3/4-10 Center Jam	
13	444754	4	Locknut, 5/16-24 Center	
14	2811364	1	Steering Wheel	
	2811365	1	• Steering Wheel Cap	
15	400216	1	Screw, 5/16-18 x 2-3/4" Hex Head	
16	445781	4	Nut, 5/16-18 Whiz-Lock	
17	416911	2	Screw, #10-24 x 1/2" Thread Cutting	
18	404016	6	Screw, 1/4-20 x 5/8: Truss Head	
19	446142	2	Lockwasher, 3/8 Heavy	
20	400258	2	Screw, 3/8-16 x 3/4" Hex Head	
21	441602	4	Carriage Bolt, 5/16-18 x 3/4"	

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TURFCAT 500 SERIES

11.1 Air Cleaner

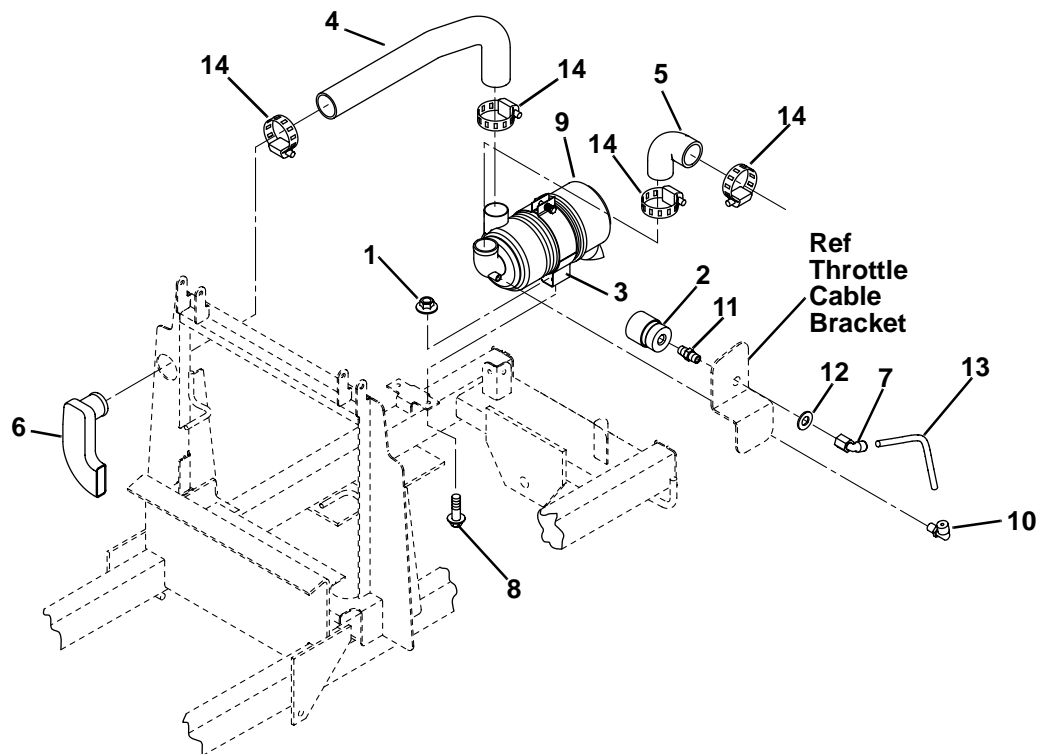
Diesel Units

Serial No. 66146 All

Serial No. 66148 All

Serial No. 66149 All

Serial No. 66150 All



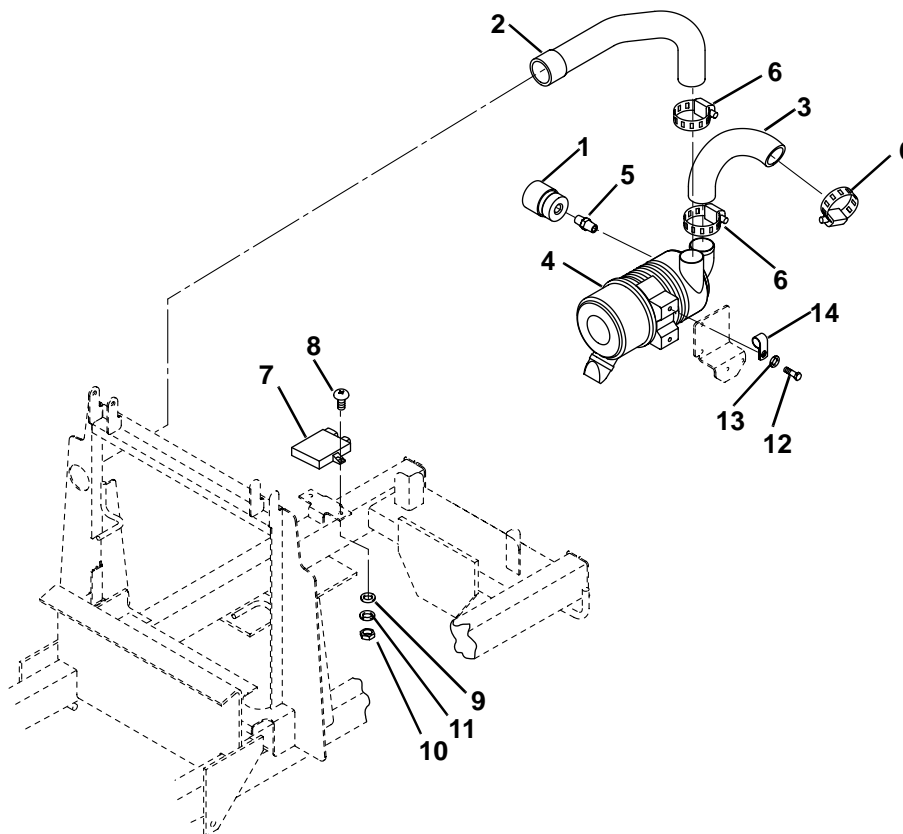
TC500-18

Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	445781	2	Nut, 5/16-18 Whiz-Lock	Non Turbo Engines Only Turbo Engines Only
2	365398	1	Indicator, Air Cleaner Service	
3	3001388	1	Bracket, Air Filter	
4	3006096	1	Hose, Air Cleaner Inlet	
5	3006097	1	Hose, Engine Air Intake	
5	3006984	1	Hose, Turbo Intake	
6	3006091	1	Plenum, Air Cleaner	
7	3007958	1	Elbow, Female	
8	403751	2	Screw, 5/16-18 x 3/4" Serr Washer	
9	3001965	1	Air Cleaner Assembly	
	5000919	1	• Air Cleaner Element	
	5000920	1	• Air Cleaner Cover	
	5000921	1	• Valve	
10	3004253	1	Elbow, Male	
11	3008144	1	Adapter	
12	453011	1	Flat Washer, 3/8	
13	5002126	9.5"	Tube, Nylon	
14	326799	4	Clamp, Hose	

> Change from previous revision

12.1 Air Cleaner

Gas Units

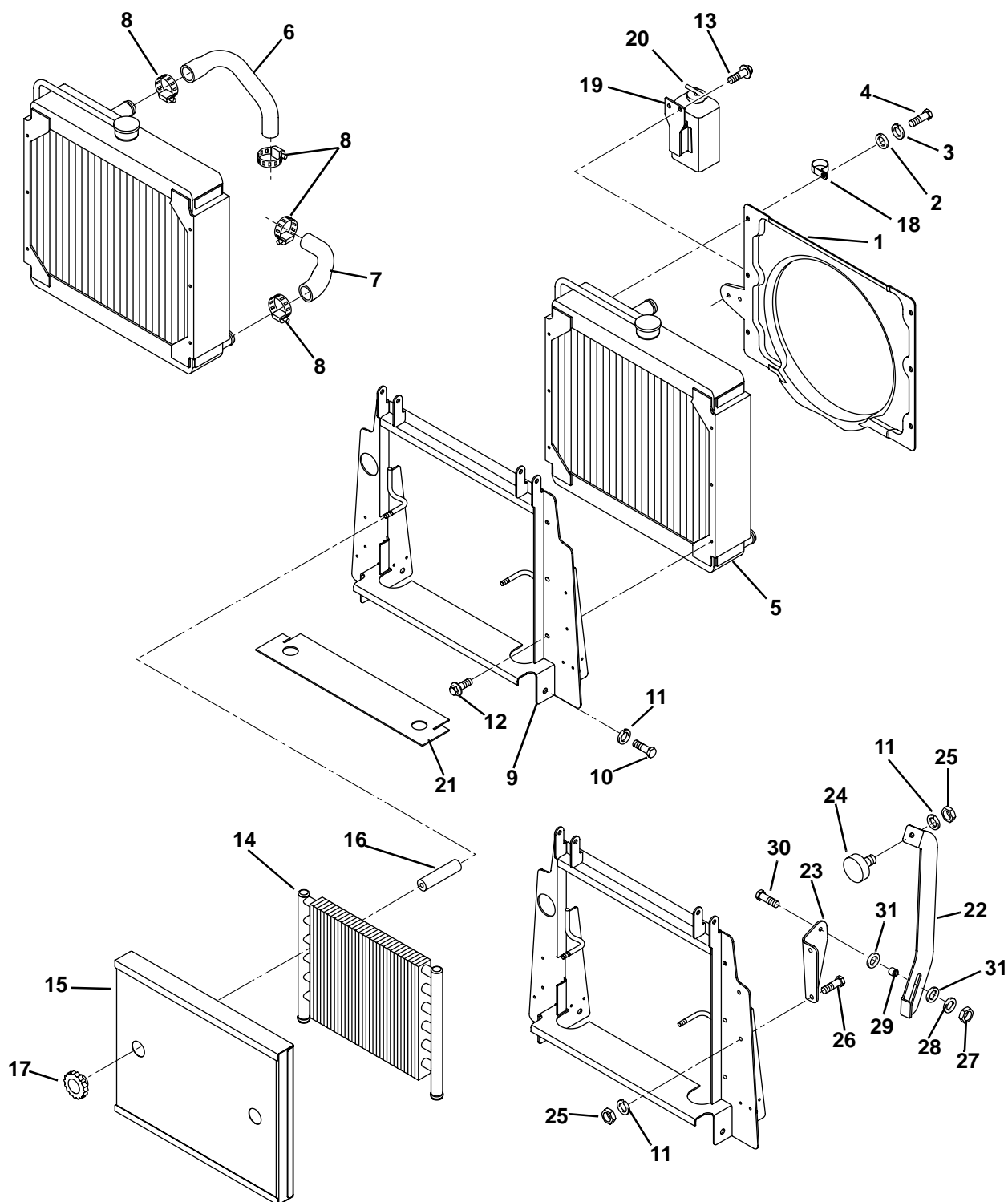


TC500-19

Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	365398	1	Indicator, Air Cleaner Service	Route Fuel Line Through Clamp
2	3008449	1	Hose, Air Cleaner Intake	
3	3008450	1	Hose, Engine Intake	
4	1001354	1	Air Cleaner Assembly	
	5000913	1	• Air Cleaner Element	
	5000912	1	• Air Cleaner Cover	
	5000914	1	• Valve	
5	3008144	1	Adapter	
6	326799	3	Clamp, Hose	
7	REF	1	Engine Ignition Controller	
8	403912	2	Screw, #10-24 x 5/8" Truss Head	
9	452002	2	Flat Washer, #10	
10	444310	2	Nut, #10 Hex	
11	446116	2	Lockwasher, #10	
12	361005	2	Screw, M8-1.25 x 25 mm	
13	446136	2	Lockwasher, 5/16 Heavy	
14	345666	1	Clamp	

> Change from previous revision

13.1 Radiator and Oil Cooler



TURFCAT 500 SERIES

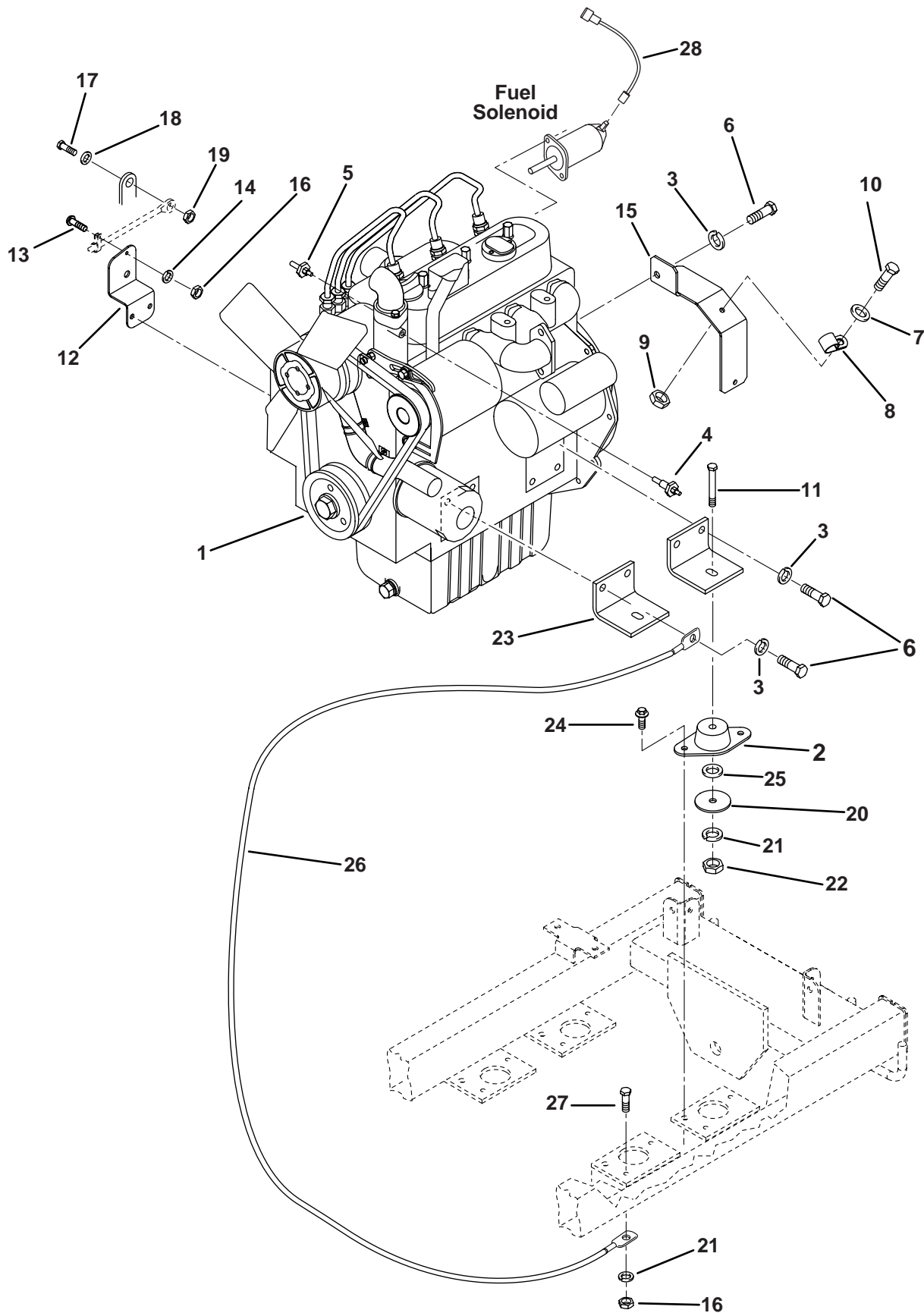
Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	1002547	1	Shroud, Fan	Diesel Units Only
1	3009147	1	Shroud, Fan	Gas Units Only
2	452004	6	Flat Washer, 1/4	
3	446130	6	Lockwasher, 1/4 Heavy	
4	400106	6	Screw, 1/4-20 x 5/8" Hex Head	
5	1002548	1	Radiator	
	550863	1	• Radiator Pressure Cap	
	162479	1	• Drain Cock	
6	3006257	1	Hose, Upper Radiator	Diesel Units Only
6	3008332	1	Hose, Upper Radiator	Gas Units Only
7	3006258	1	Hose, Lower Radiator	Diesel Units Only
7	3008333	1	Hose, Lower Radiator	Gas Units Only
8	367458	4	Clamp, Hose	
9	1002618	1	Radiator Support	
10	400262	4	Screw, 3/8-16 x 1" Hex Head	
11	446142	4	Lockwasher, 3/8 Heavy	
12	403769	6	Screw, 1/4-20 x 1/2" Hex Flange	
13	403751	2	Screw, 5/16-18 x 3/4" Serr Washer	
14	3005948	1	Oil Cooler	
15	1002655	1	Screen	
16	3006430	2	Iso Mount, Oil Cooler	
17	3006431	2	Knob	
18	365566	1	Hose Clamp	
19	554231	1	Stay, Reserve Tank	Diesel Units Only
19	N/S	1	Stay, Reserve Tank	Gas Units Only
20	5001207	1	Reserve Tank	Diesel Units Only
20	N/S	1	Reserve Tank	Gas Units Only
21	3010078	1	Seal, Radiator	
22	3010350	1	Bracket, Prop	
23	3010351	1	Bracket	
24	361723	1	Stop, Rubber	
25	443110	3	Nut, 3/8-16 Hex	
26	400258	2	Screw, 3/8-16 x 3/4" Hex Head	
27	444718	1	Locknut, 5/16-18 Center	
28	453009	1	Flat Washer, 5/16	
29	3007941	1	Spacer	
30	400188	1	Screw, 5/16-18 x 1" Hex Head	
31	453017	2	Flat Washer, 1/2	

> Change from previous revision

TURFCAT 500 SERIES

14.1 Diesel Engine Mounting

Serial No. 66146 All
Serial No. 66148 All
Serial No. 66149 All
Serial No. 66150 All



TC500-06

Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	REF	1	Kubota D905-EB	T523 Units Only
1	REF	1	Kubota D1105-E	T528 Units Only
1	REF	1	Kubota D1105-T	T535 Units Only
	557759	1	• Engine Oil Filter	Used on all Diesel Units
2	366879	4	Isolator, Engine	
3	446146	10	Lockwasher, 7/16	
4	363996	1	Switch, Temp Warning	
5	364501	1	Temp Sender	
6	362263	10	Screw, M10-1.25 x 25 MM Hex Head	
7	452004	2	Flat Washer, 1/4	
8	345671	2	Clamp, Hose	
9	445794	2	Nut, 1/4-20 Spiralock Flange	
10	400108	2	Screw, 1/4-20 x 3/4" Hex Head	
11	400274	4	Screw, 3/8-16 x 2-1/2" Hex Head	
12	3005384	1	Bracket, Throttle Cable	
13	402118	1	Screw, #10-24 x 1/2" Slotted Head	
14	446116	1	Lockwasher, #10	
15	3007756	1	Bracket, Fuel Line	
16	444310	1	Nut, #10-24 Hex	
17	400184	1	Screw, 5/16-18 x 3/4" Hex Head	
18	453009	1	Flat Washer, 5/16	
19	444718	1	Locknut, 5/16-18 Center	
20	362819	4	Washer, Isolator	
21	446140	5	Lockwasher, 3/8	
22	443110	5	Nut, 3/8-16 Hex	
23	3008339	4	Bracket, Engine Mount	
24	409812	8	Screw, 5/16-18 x 3/4" Thread Cut	
25	452008	12	Flat Washer, 3/8	
26	2810424	1	Cable, Black	
27	400262	1	Screw, 3/8-16 x 1" Hex Head	
28	2811022	1	Adaptor Wire (Fuel Solenoid)	

> Change from previous revision

TURFCAT 500 SERIES

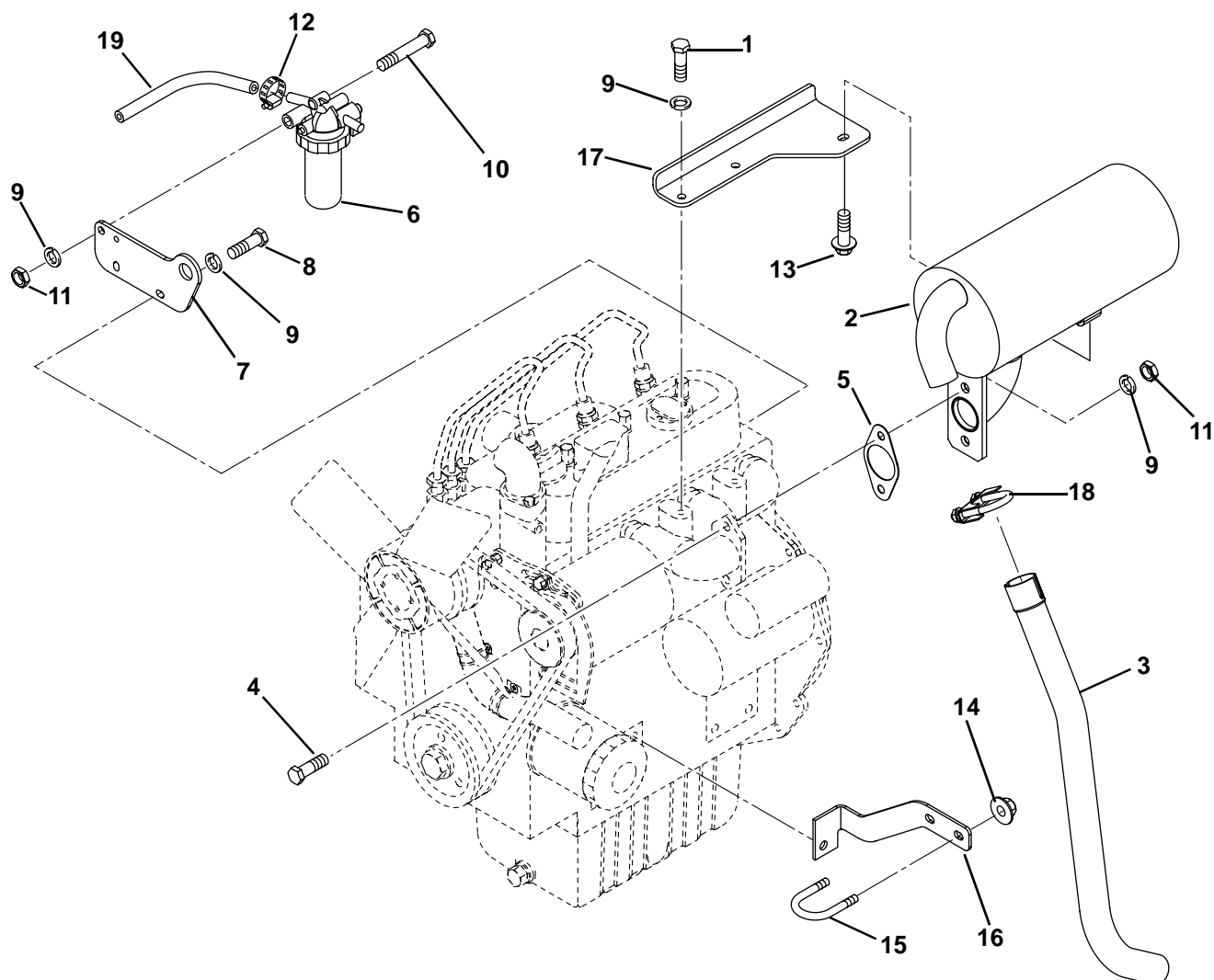
15.1 Diesel Exhaust

Non Turbo Engines

Serial No. 66146 All

Serial No. 66148 All

Serial No. 66149 All

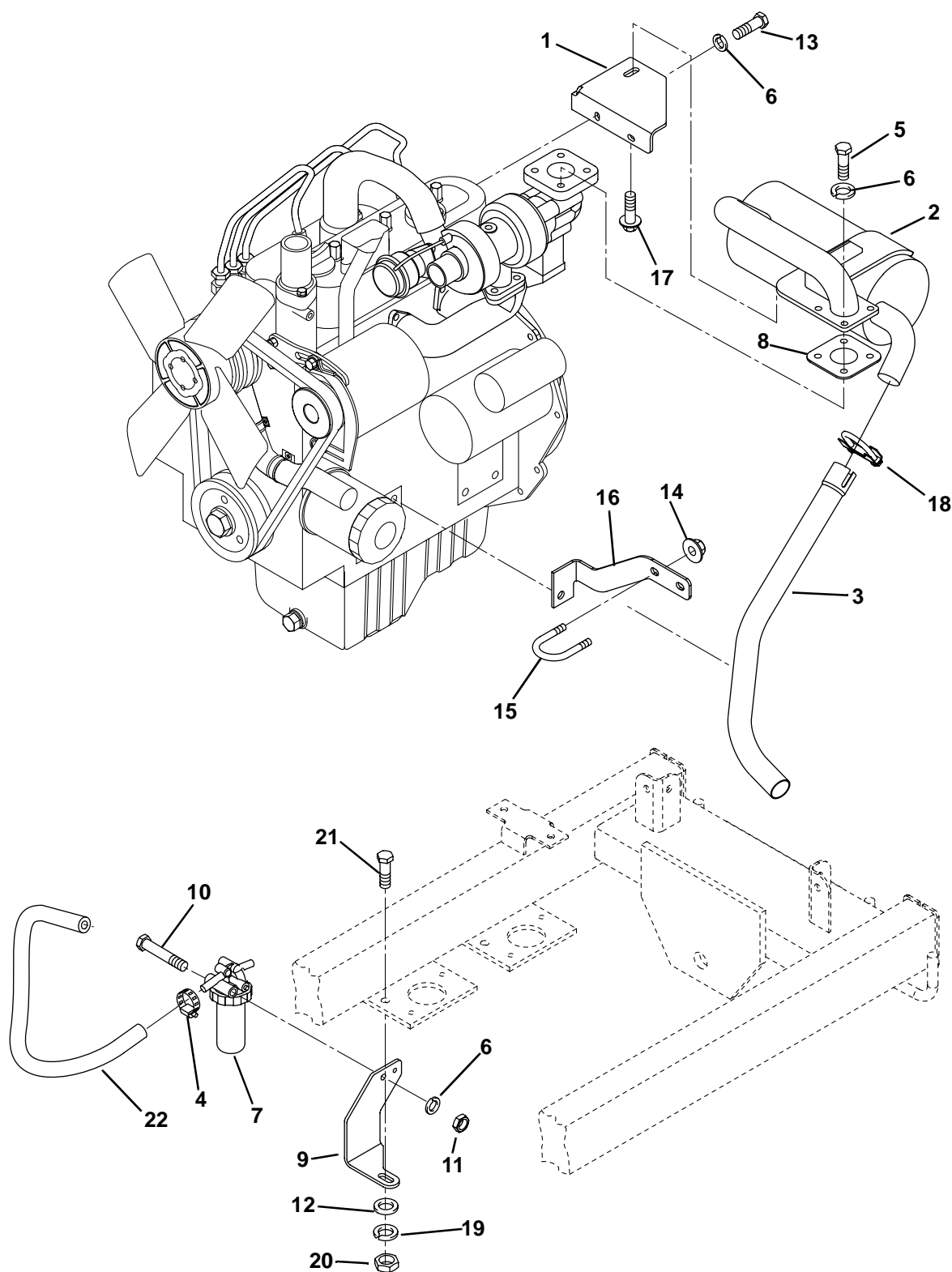


Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	363586	2	Screw, M8-1.25 x 20 MM Hex Head	Included with Engine
2	3005936	1	Muffler	
3	3006027	1	Tail Pipe	
4	400192	2	Screw, 5/16-18 x 1-1/2" Hex Head	
5	5003476	1	Gasket, Exhaust	
6	550553	1	Fuel Filter	
7	3006121	1	Bracket, Fuel Filter	
8	361898	2	Screw, M8-1.25 x 16 MM Hex Head	
9	446136	7	Lockwasher, 5/16 Heavy	
10	400202	1	Screw, 5/16-18 x 3" Hex Head	
11	443106	3	Nut, 5/16-18 Hex	
12	366526	2	Clamp, Hose	
13	403770	1	Screw, 5/16-18 x 3/4" Hex Flange	
14	445781	2	Nut, 5/16-18 Whiz-Lock	
15	3008385	1	U-Bolt	
16	3008386	1	Bracket, Exhaust	
17	3008120	1	Bracket, Support	
18	1002033	1	Muffler Clamp	
19	554748	15"	Fuel Line (Filter To Engine)	

> Change from previous revision

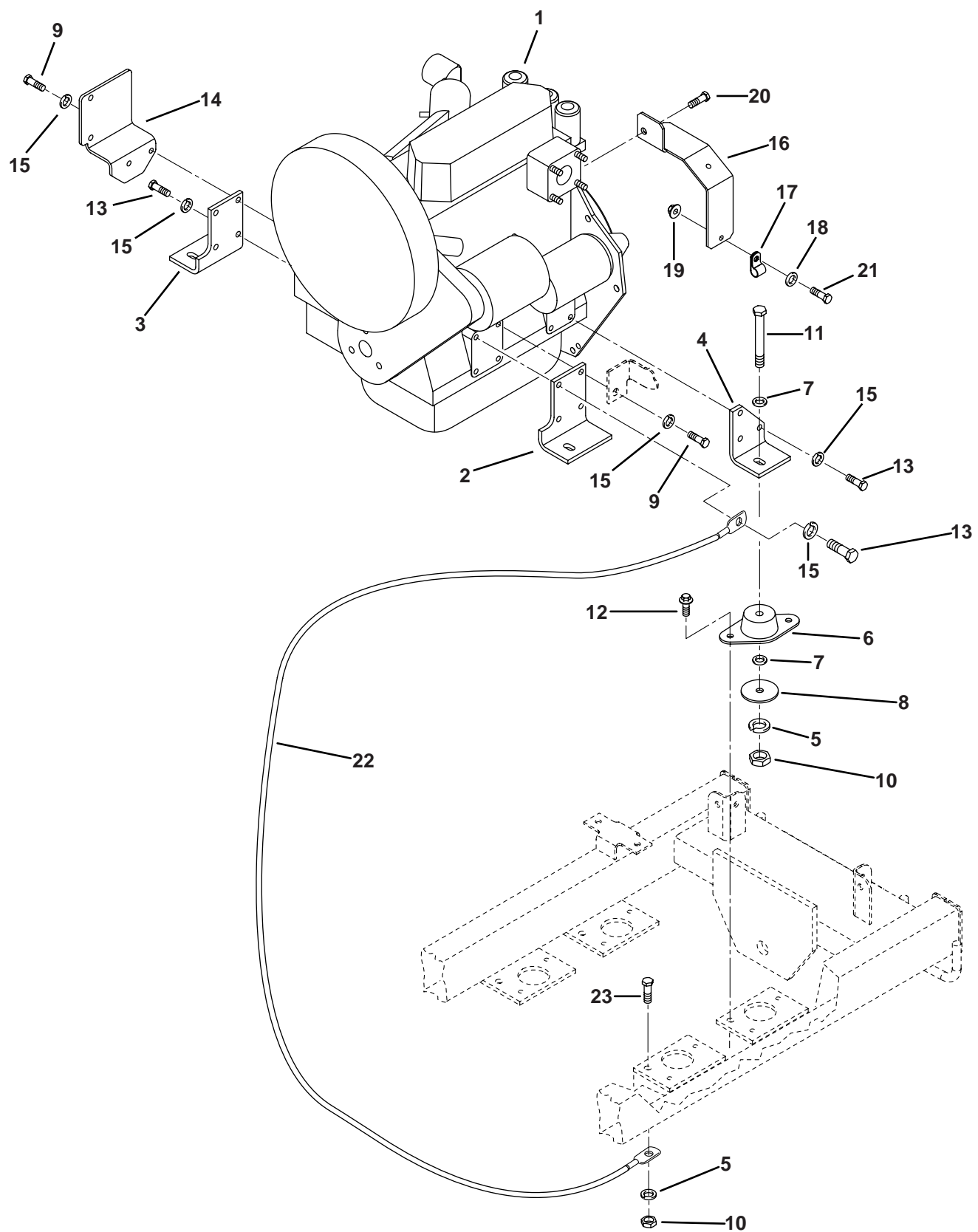
16.1 Diesel Exhaust

Turbo Engines

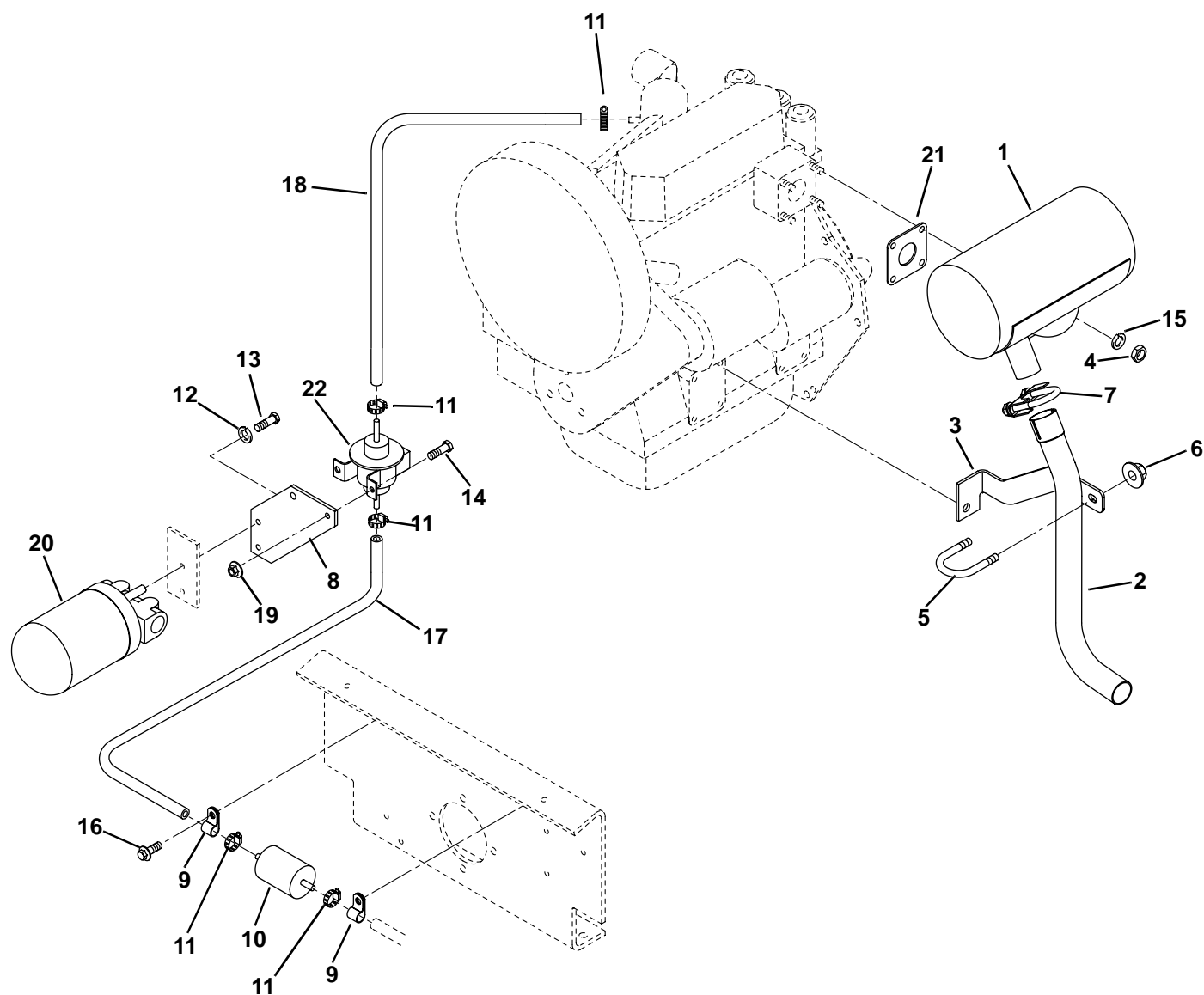


Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	3008220	1	Bracket, Muffler Support	Included with Engine
2	3006979	1	Muffler, Turbo Engine	
3	3008221	1	Tail Pipe, Turbo Engine	
4	366526	2	Clamp, Hose	
5	363586	4	Screw, M8-1.25 x 20 mm Hex Head	
6	446136	7	Lockwasher, 5/16 Heavy	
7	550553	1	Fuel Filter	
8	553020	1	Gasket, Exhaust	
9	3009046	1	Bracket, Fuel Filter	
10	400202	1	Screw, 5/16-18 x 3" Hex Head	
11	443106	1	Nut, 5/16-18 Hex	
12	453011	1	Flat Washer, 3/8	
13	361898	2	Screw, M8-1.25 x 16 MM Hex Head	
14	445781	2	Nut, 5/16-18 Hex Whiz-Lock	
15	3008385	1	U-Bolt	
16	3008386	1	Bracket, Exhaust	
17	403751	1	Screw, 5/16-18 x 3/4" Serr Washer	
18	1002033	1	Clamp, Exhaust	
19	446140	1	Lockwasher, 3/8	
20	443110	1	Nut, 3/8-16 Hex	
21	400262	1	Screw, 3/8-16 x 1" Hex Head	
22	554748	15"	Fuel Line (Filter To Engine)	

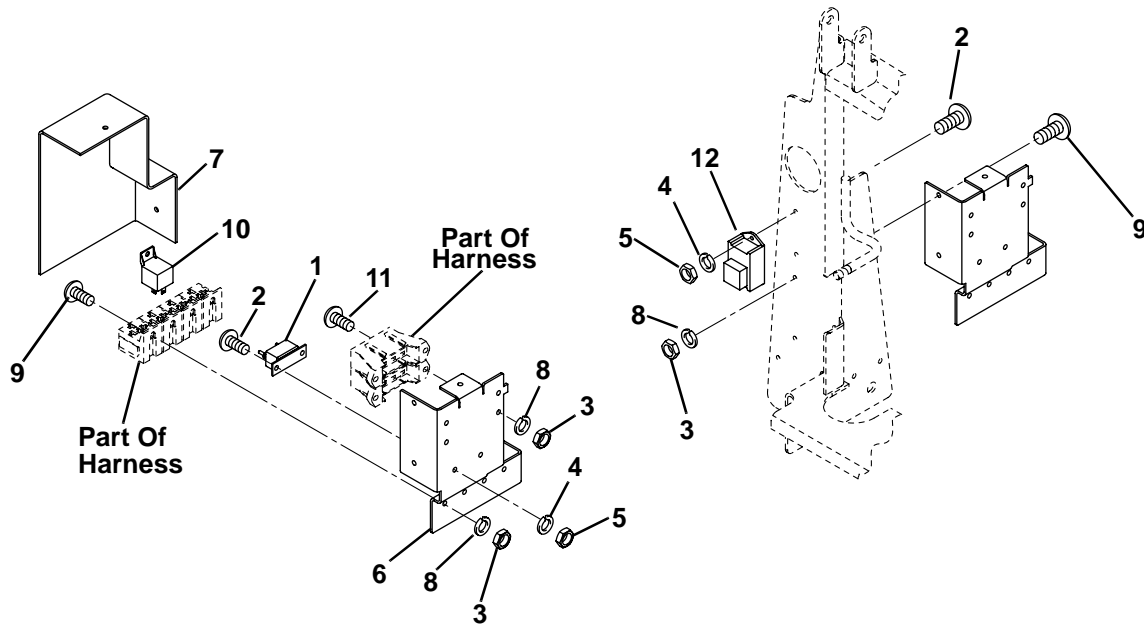
> Change from previous revision



Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	REF	1	Engine	Included with Engine
	5003069	1	• Oil Filter	
2	3007769	1	Mount, Front Left Engine	
3	3007770	1	Mount, Front Right	
4	3007771	2	Mount, Rear Engine	
5	446142	5	Lockwasher, 3/8 Heavy	
6	366879	4	Isolator, Engine	
7	452008	8	Flat Washer, 3/8	
8	362819	4	Washer	
9	361005	3	Screw, M8-1.25 x 25 mm Hex Head	
10	443110	5	Nut, 3/8-16 Hex	
11	400274	4	Screw, 3/8-16 x 2-1/2" Hex Head	
12	409812	8	Screw, 5/16-18 x 3/4" Thread Cut	
13	363586	11	Screw, M8-1.25 x 20 mm Hex Head	
14	3008451	1	Bracket, Air Filter Mounting	
15	446136	14	Lockwasher, 5/16 Heavy	
16	3007756	1	Bracket	
17	345671	1	Hose Clamp	
18	452004	1	Flat Washer, 1/4	
19	445794	2	Nut, 1/4-20 Spiralock Flange	
20	N/S	1	Screw	
21	400108	2	Screw, 1/4-20 x 3/4" Hex Head	
22	2810424	1	Cable, Black	
23	400262	1	Screw, 3/8-16 x 1" Hex Head	



Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	3008751	1	Muffler, Gas Engine	
2	3008815	1	Tailpipe	
3	3008386	1	Bracket, Exhaust	
4	362539	4	Nut, M8-1.25	
5	3008385	1	U-Bolt	
6	445781	2	Nut, 5/16-28 Whiz-Lock	
7	1002033	1	Clamp, Muffler	
8	3009851	1	Bracket, Fuel Pump	
9	345666	2	Clamp, Fuel Hose	
10	5003070	1	Filter, Fuel	
11	366526	5	Clamp, Hose	
12	446128	2	Lockwasher, 1/4	
13	400112	2	Screw, 1/4-20 x 1" Hex Head	
14	400108	2	Screw, 1/4-20 x 3/4" Hex Head	
15	446136	4	Lockwasher, 5/16 Heavy	
16	409811	2	Screw, 5/16-18 x 5/8" Thread Cut	
17	554748	27"	Fuel Hose, 5/16 I.D.	Fuel Filter to Fuel Pump
18	554748	21"	Fuel Hose, 5/16 I.D.	Fuel Pump to Engine
19	445794	2	Nut, 1/4-20 Spiralock Flange	
20	1002807	1	Return Filter	
	5002892	1	• Filter Element	
21	N/S	1	Gasket, Exhaust	Included with Engine
22	N/S	1	Fuel Pump	Included with Engine

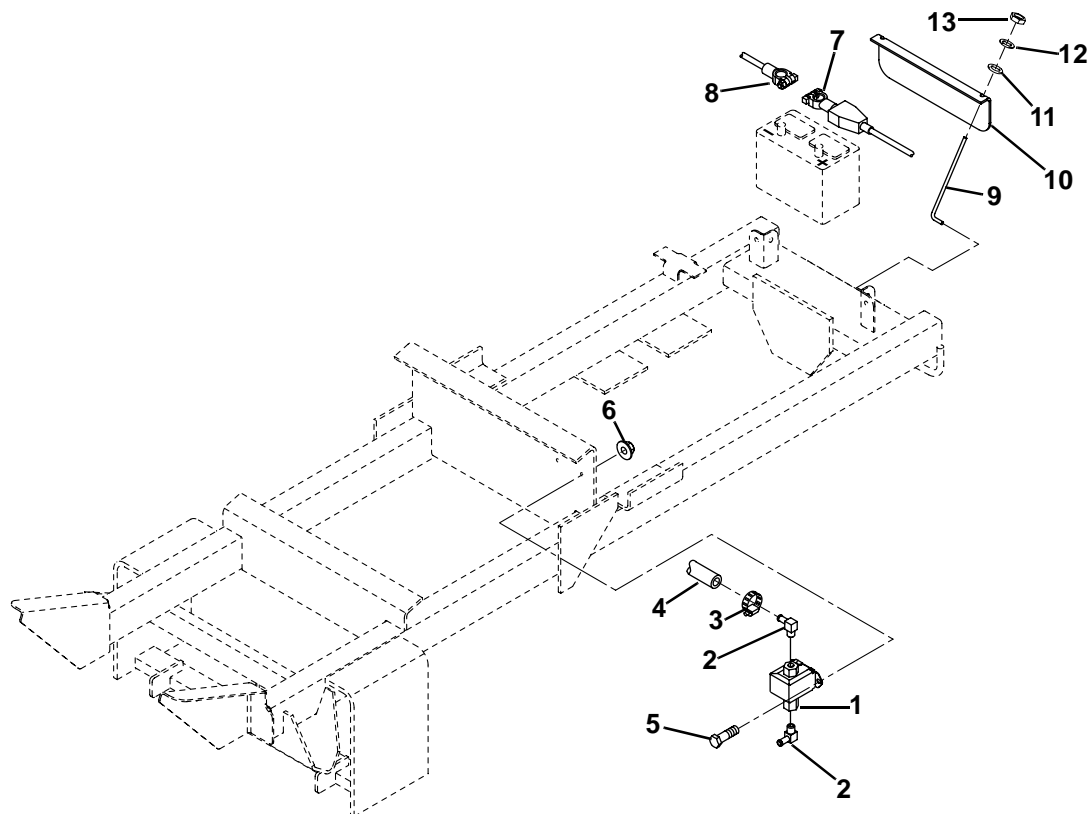


TC500-36

Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	361439	1	Circuit Breaker, 50A	Diesel Units Only
2	403860	AR	Screw, #8-32 x 5/8" Truss Head	
3	444310	6	Nut, #10-24 Hex	
4	446110	AR	Lockwasher, #8	
5	444306	AR	Nut, #8-32 Hex	
6	1004477	1	Bracket, Fuse	
7	3009220	1	Cover, Box	
8	446116	6	Lockwasher, #10	
9	403910	4	Screw, #10-24 x 1/2" Truss Head	
10	3001307	AR	Relay, SPST with Resistor	
11	403912	2	Screw, #10--24 x 5/8" Truss Head	
12	3009544	1	Relay, Time Delay	
	5003278	AR	5A Fuse	
	5003281	AR	15A Fuse	
	5003284	AR	30A Fuse	

> Change from previous revision

20.1 Battery and Diesel Fuel Pump

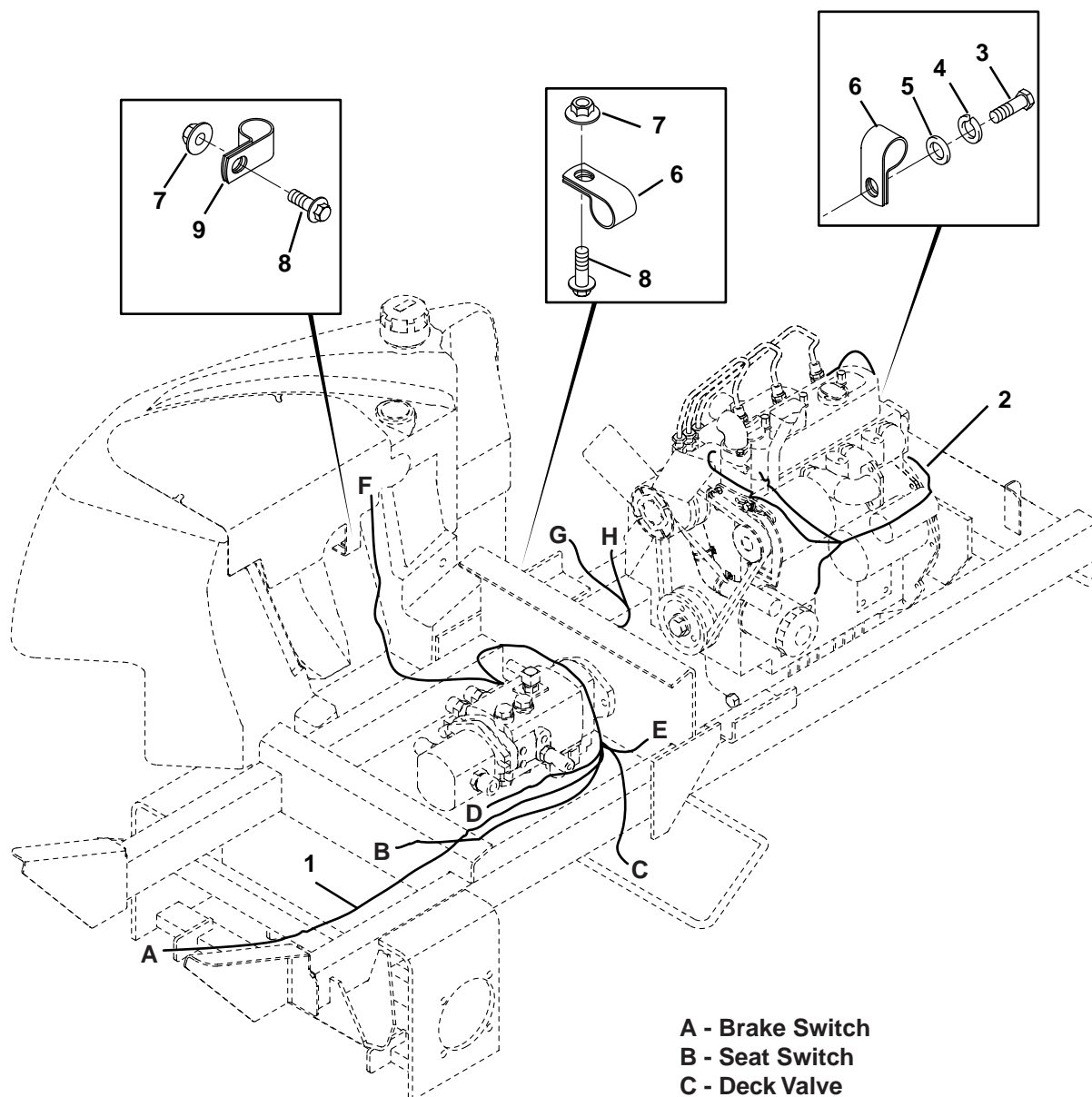


TC500-37

Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	1004465	1	Fuel Pump	Diesel Units Only
2	365976	2	Elbow, 90° Fuel	Diesel Units Only
3	366526	2	Clamp, Fuel Hose	Diesel Units Only
4	554748	54"	Fuel Hose, Fuel Pump to Filter	Diesel Units Only
5	400110	2	Screw, 1/4-20 x 7/8" Hex Head	Diesel Units Only
6	445784	2	Nut, 1/4-20 Whiz-Lock	Diesel Units Only
7	131076	1	Positive Battery Cable	
8	153244	1	Negative Battery Cable	
9	3005750	2	J-Hook	
10	3000525	1	Battery Hold Down	
11	452004	2	Flat Washer, 1/4	
12	446130	2	Lockwasher, 1/4 Heavy	
13	443102	2	Nut, 1/4-20 Hex	

> Change from previous revision

21.1 Electrical Routing



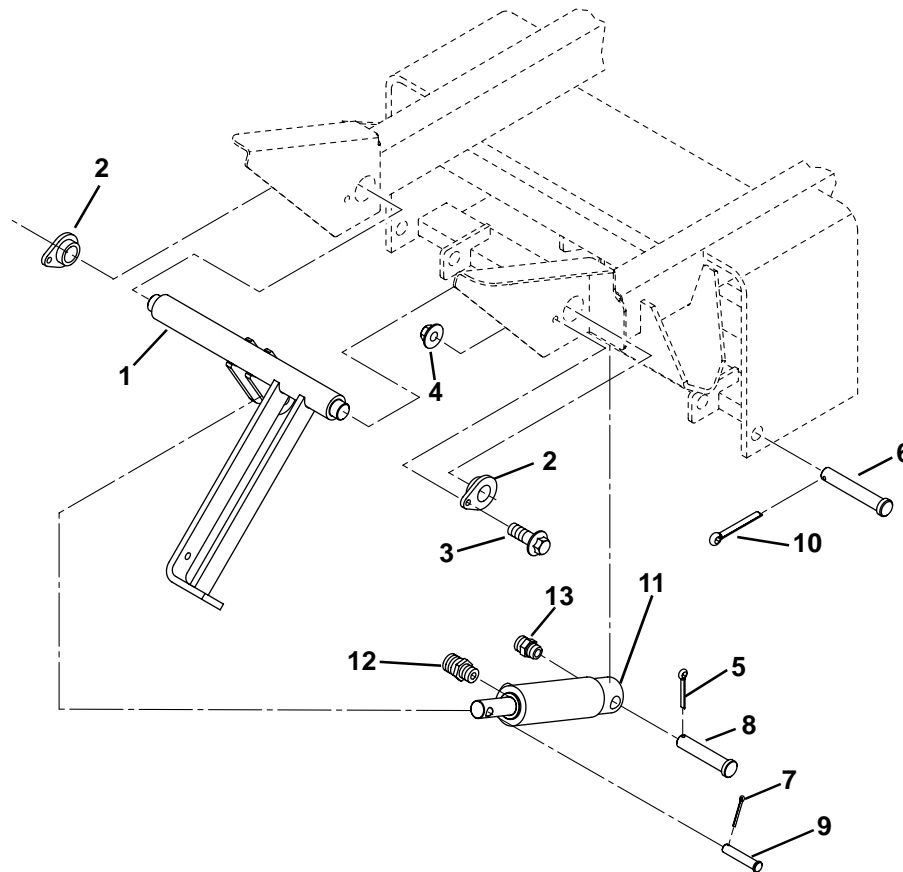
- A - Brake Switch
- B - Seat Switch
- C - Deck Valve
- D - Differential Lock Valve (Optional)
- E - Fuel Pump
- F - Instrument Panel
- G - Electrical Box
- H - Engine Harness

TURFCAT 500 SERIES

Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	1004934	1	Tractor Wire Harness	Gas Units Only
	1004710	1	Tractor Wire Harness	2WD Diesel Units Only
	1004615	1	Tractor Wire Harness	4WD Diesel Units Only
2	1004077	1	Engine Wire Harness	Gas Units Only
	1003655	1	Engine Wire Harness	Diesel Units Only
	5003762	1	Resistor, Alternator	Used On All Units
3	355174	1	Screw, M6-1 x 12mm Hex Head	
4	446128	1	Lockwasher, 1/4	
5	452004	1	Flat Washer, 1/4	
6	364190	2	Clamp, Harness	
7	445795	2	Nut, 5/16-18 Spiralock Flange	
8	403770	2	Screw, 5/16-18 x 3/4" Hex Flange	
9	361064	1	Clamp, Harness	

> Change from previous revision

22.1 Lift Linkage

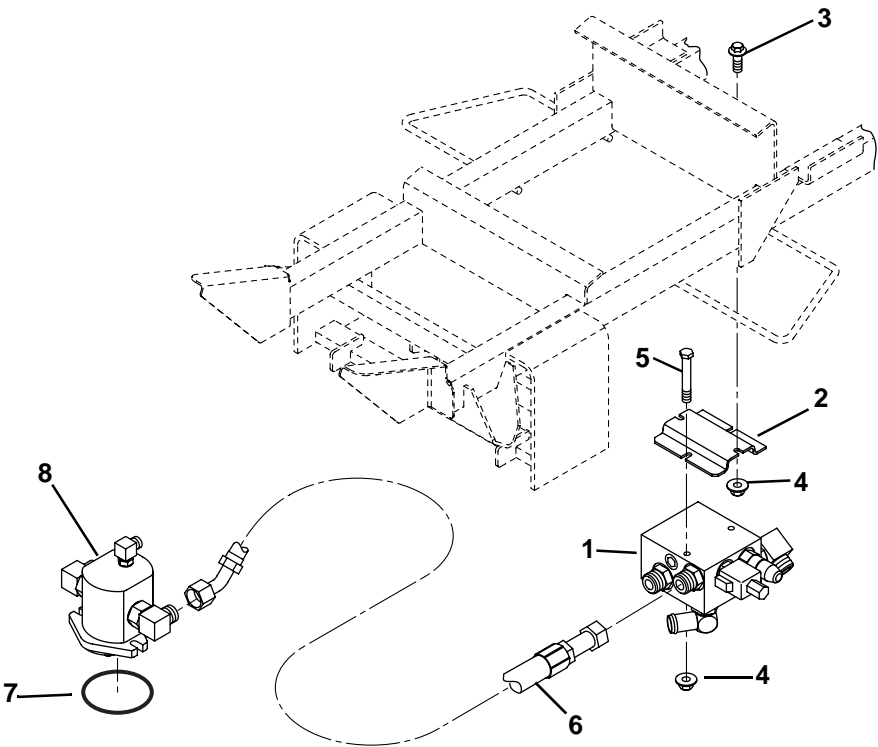


TC500-20

Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	1002664	1	Lift Assembly	Used on Gold Star Cylinders Only Used on HDM Cylinders only
2	3005742	2	Bearing, Lift	
3	403770	2	Screw, 5/16-18 x 3/4" Hex Flange	
4	445781	2	Nut, 5/16-18 Whiz-Lock	
5	460040	1	Cotter Pin, 5/32 x 1-1/4"	
6	3003210	2	Shaft, Push Arm Mounting	
7	460026	1	Cotter Pin, 1/8 x 3/4"	
8	461476	1	Clevis Pin, 3/4 x 3-11/16"	
9	461495	1	Clevis Pin, 1/2 x 2-1/2"	
10	460052	2	Cotter Pin, 3/16 x 1-1/2"	
11	1002850	1	Cylinder, Lift	
	502960	1	• Seal Kit - Gold Star	
	5003661	1	• Seal Kit - HDM	
12	339979	1	• Adapter, Straight	
13	339979	1	Adaptor, Straight	

> Change from previous revision

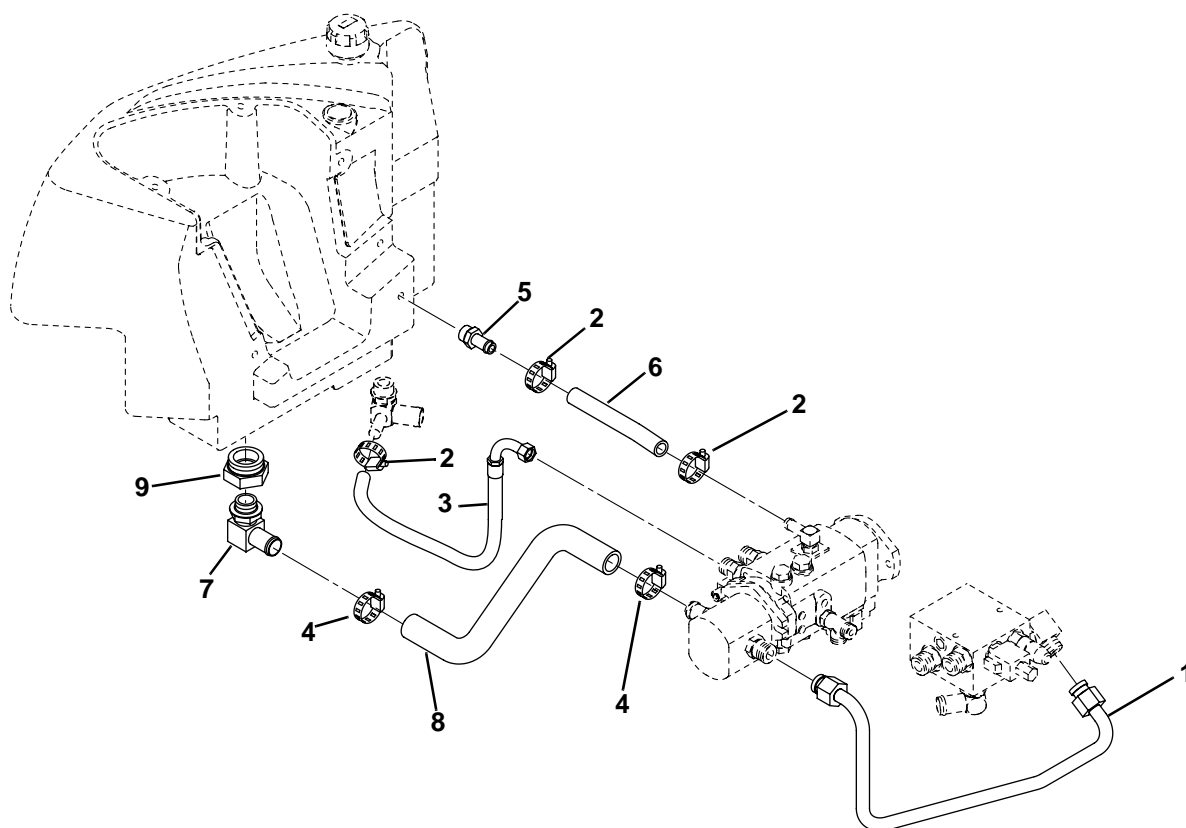
23.1 Deck Hydraulics



TC500-27

Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	—	1	Deck Valve Assembly	See 32.1
2	3007533	1	Bracket, Valve Mounting	
3	403770	2	Screw, 5/16-18 x 3/4" Whiz-Lock	
4	445781	4	Nut, 5/16-18 Whiz-Lock	
5	400206	2	Screw, 5/16-18 x 4" Hex Head	
6	1003087	2	Hose, Deck Valve to Deck Motor	
7	362743	1	O-Ring	
8	—	1	Deck Motor Assembly	See 34.1

> Change from previous revision

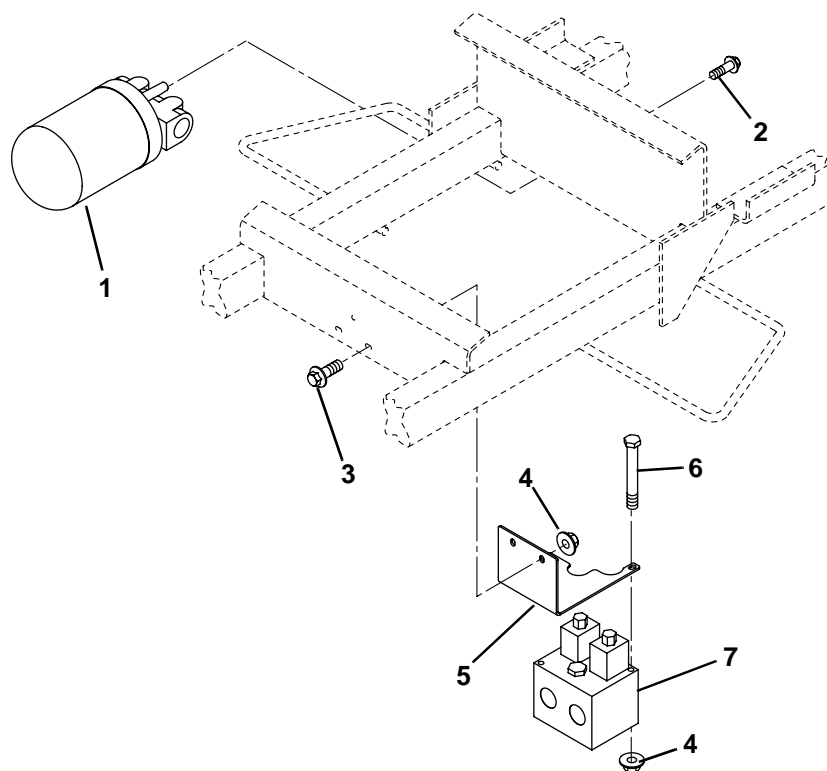


TC500-29

Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	1003499	1	Tube, Gear Pump to Deck Valve	
2	349816	3	Clamp, Hose	
3	1002960	1	Hose, Tank to Pump Inlet	
4	367458	2	Clamp, Hose	
5	3007699	1	Fitting, Straight Beaded	
6	3006600	1	Hose, Pump to Tank	
7	3005387	1	Fitting, 90° Beaded	
8	3006602	1	Hose, Tank to Gear Pump Inlet	
9	3006624	1	Fitting Reducer	

> Change from previous revision

25.1 Filter and Differential Lock Valve Mounting



TC500-34

Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	1002807	1	Return Filter	Diesel Units Only
	5002892	1	• Filter Element	
2	403769	2	Screw, 1/4-20 x 1/2" Hex Flange	Turbo Units Only
3	403751	3	Screw, 5/16-18 x 3/4" Serr Washer	
4	445781	4	Nut, 5/16-18 Whiz-Lock	Turbo Units Only
5	3008476	1	Bracket, Valve Mounting	Turbo Units Only
6	400208	2	Screw, 5/16-18 x 4-1/2" Hex Head	Turbo Units Only
7	1004268	1	Differential Lock Valve	Turbo Units Only, See 37.1

> Change from previous revision

TURFCAT 500 SERIES

26.1 Traction Hydraulics

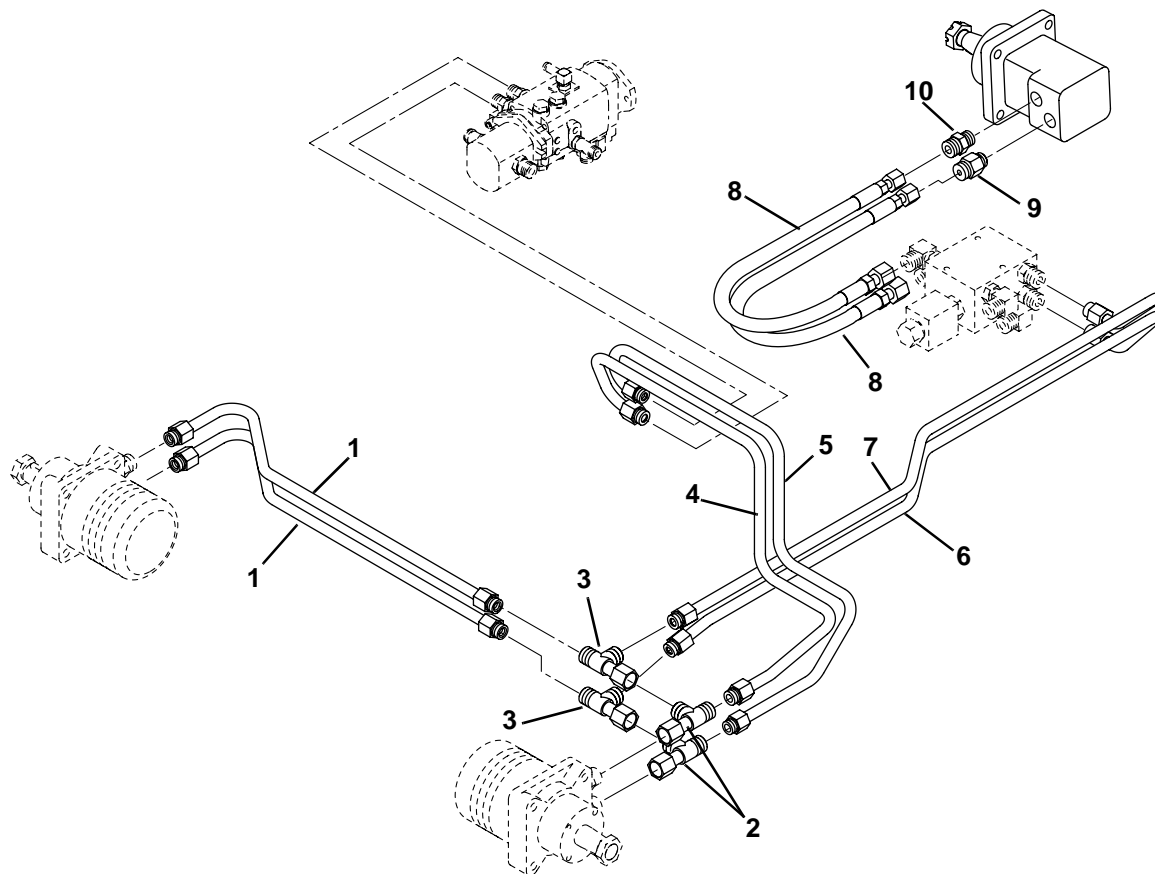
Non Turbo Units

Serial No. 66146 All

Serial No. 66148 All

Serial No. 66149 All

Serial No. 66151 All



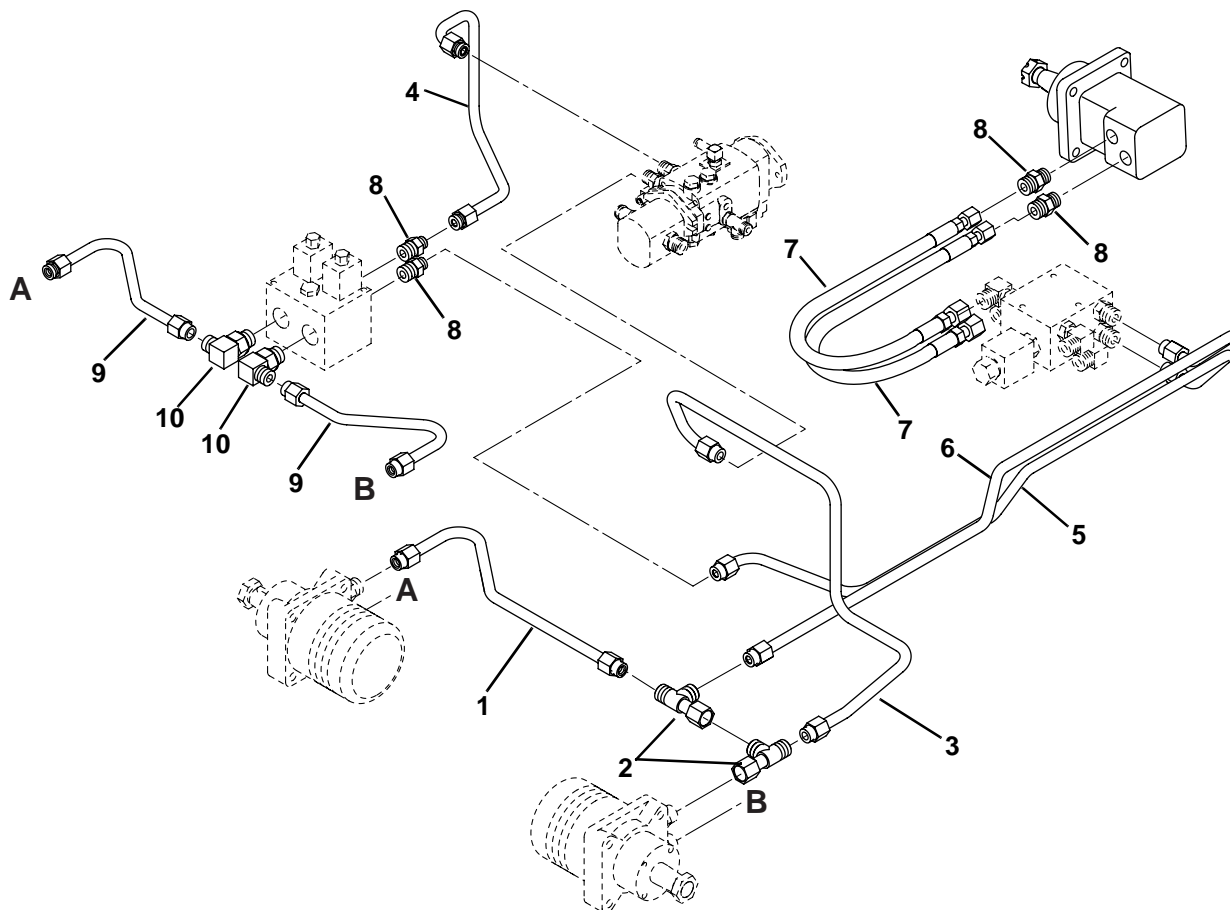
TC500-30

Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	1002955	2	Tube, Tee To Motor	2WD Units Only
1	1003505	2	Tube, Tee To Motor	4WD Units Only
2	340121	2	Adaptor, Tee	
3	340121	2	Adaptor, Tee	4WD Units Only
4	1002956	1	Tube, Pump To Motor Top Port	
5	1002957	1	Tube, Pump to Motor Bottom Port	
6	1003525	1	Tube, Bottom Tee To 4WD Valve	4WD Units Only
7	1003524	1	Tube, Top Tee to 4WD Valve	4WD Units Only
8	1003700	4	Hose, 4WD Valve to Motor	4WD Units Only
9	3006845	2	Valve, Flow Control	4WD Units Only
10	339989	2	Adaptor, Straight	4WD Units Only

> Change from previous revision

27.1 Traction Hydraulics

Turbo Units Only

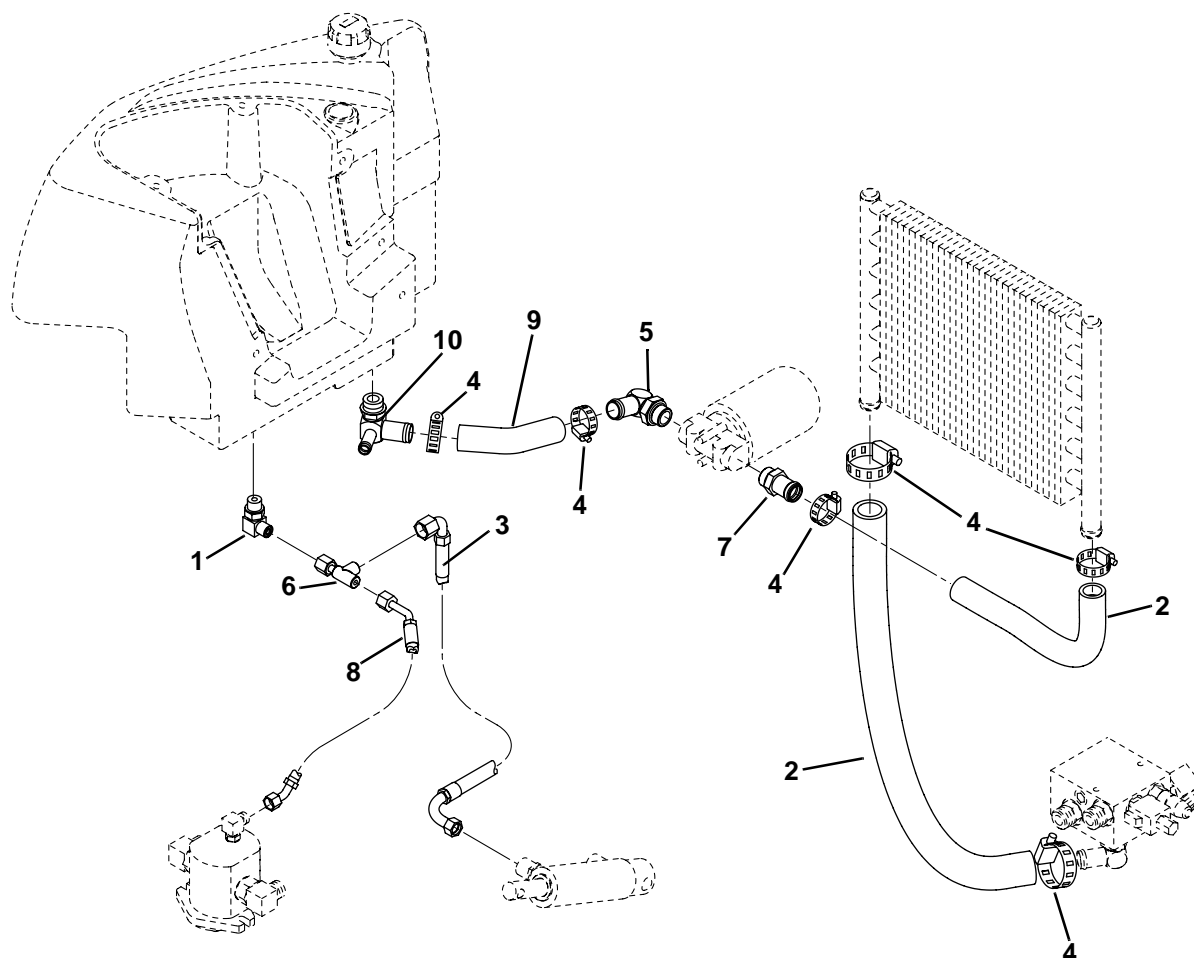


TC500-31

Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	1003505	1	Tube, Tee to Motor	
2	340121	2	Adaptor, Tee	
3	1002956	1	Tube, Pump to Motor Top Port	
4	1003894	1	Tube, Pump to Differential Valve	
5	1003893	1	Tube, Differential Valve to 4WD Valve	
6	1003524	1	Tube, Top Tee to 4WD Valve	
7	1003700	4	Hose, 4WD Valve to Motor	
8	339989	6	Adapter, Straight	
9	1003897	2	Tube, Differential Valve to Motor	
10	340070	2	Adaptor, 90°	

> Change from previous revision

28.1 Return Hydraulics

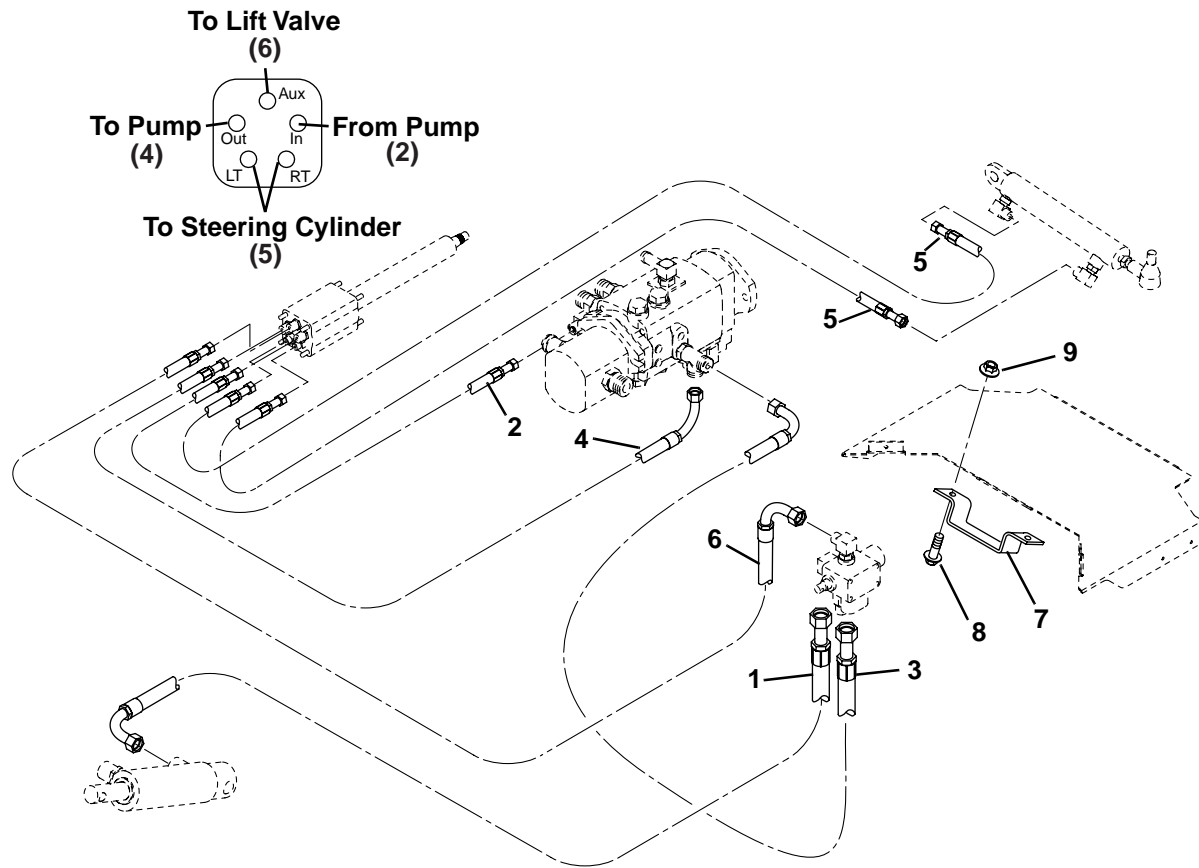


TC500-32

Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	340062	1	Adaptor, 90°	
2	1002967	1	Hose	
3	1003043	1	Hose, Lift Cylinder to Tee	
4	367458	6	Clamp, Hose	
5	3005602	1	Adaptor, 90°	
6	340119	1	Adaptor, Tee	
7	3001296	1	Fitting, Straight Beaded	
8	1003088	1	Hose, Deck Motor to Tee	
9	3006601	1	Hose, Filter to Tank	
10	3007700	1	Fitting, Special Beaded	

> Change from previous revision

29.1 Steering and Lift Hydraulics



TC500-33

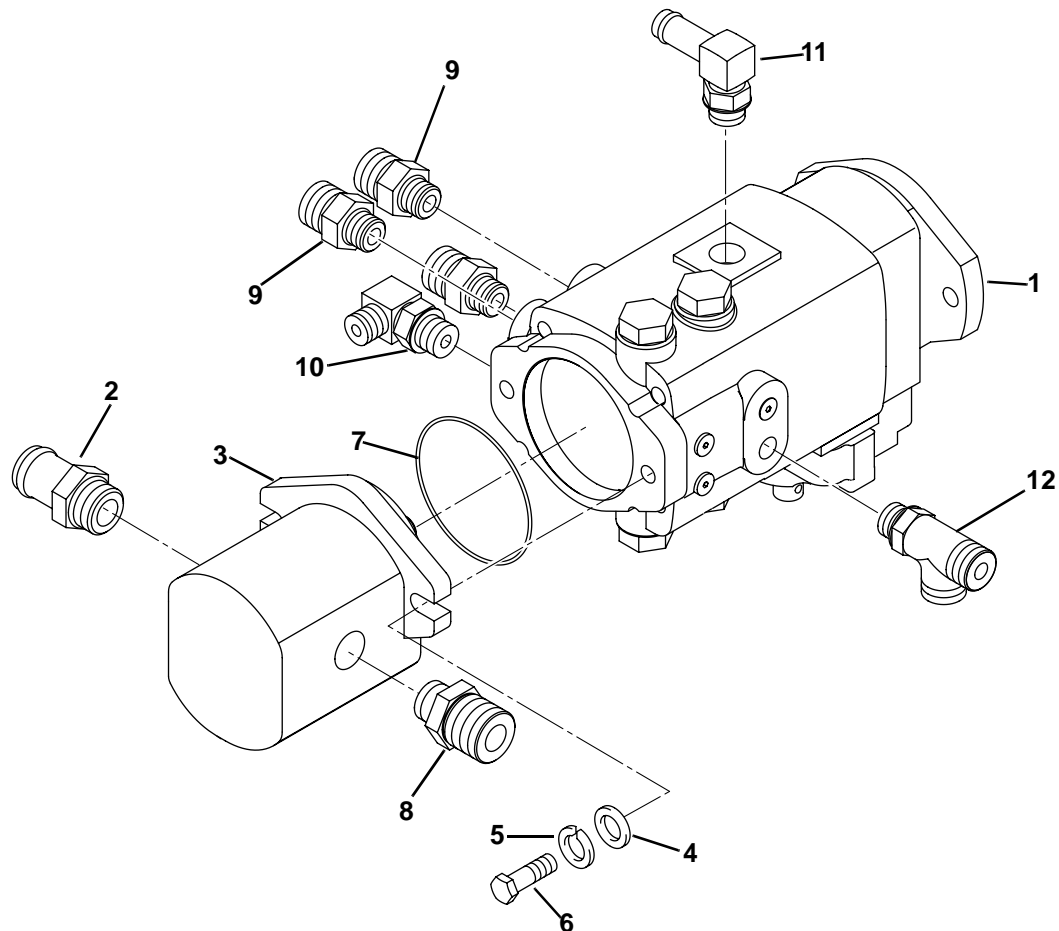
Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	1002965	1	Hose, Lift Valve to Lift Cylinder	
2	1002966	1	Hose, Pump to Steering Valve (IN)	
3	1002962	1	Hose, Lift Valve to Pump	
4	1003042	1	Hose, Steering Valve (OUT) to Pump	
5	1002963	2	Hose, Steering Valve to Cylinder	
6	1002964	1	Hose, Steering Valve to Lift Valve	
7	1004541	1	Bracket, Steering Hose Retaining	
8	403770	2	Screw, 5/16-18 x 3/4" Serr Washer	
9	445781	2	Nut, 5/16-18 Whiz Lock	

> Change from previous revision

TURFCAT 500 SERIES

30.1 Pump Assembly

Serial No. All

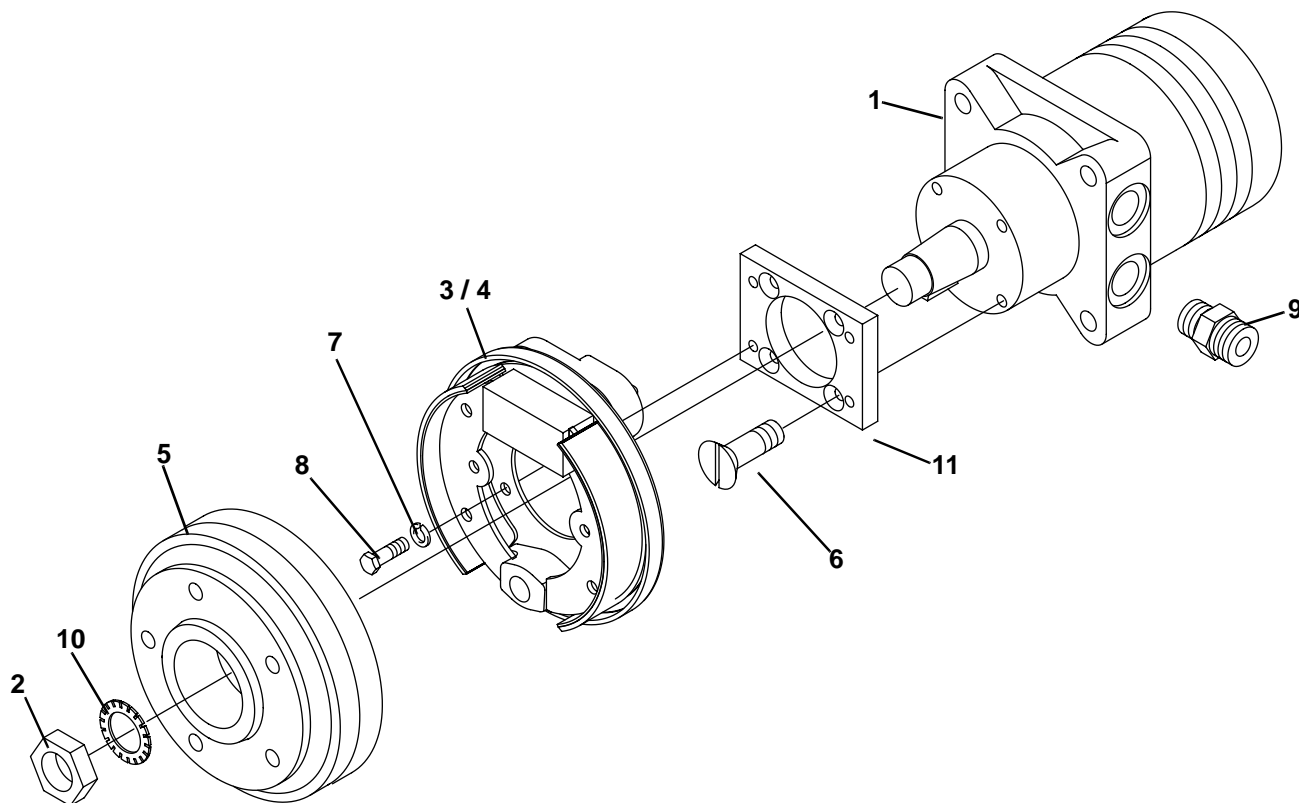


TC500-10

Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	1003271	1	Pump, Hydrostatic	See 39.1
2	3001296	1	Fitting, Beaded Insert	
3	1003041	1	Pump, Gear	
	5003158	1	• Seal Kit	
4	453011	2	Flat Washer, 3/8	
5	446142	2	Lockwasher, 3/8 Heavy	
6	400262	2	Screw, 3/8-16 x 1" Hex Head	
7	363034	1	O Ring	
8	339993	1	Adapter, Straight 12-10	
9	339988	3	Adaptor, Straight	
10	340062	1	Adaptor, 90°	
11	362090	1	Fitting, 90° Beaded	
12	340264	1	Tee, Straight Thread Run	

> Change from previous revision

31.1 Front Wheel Motor Assembly

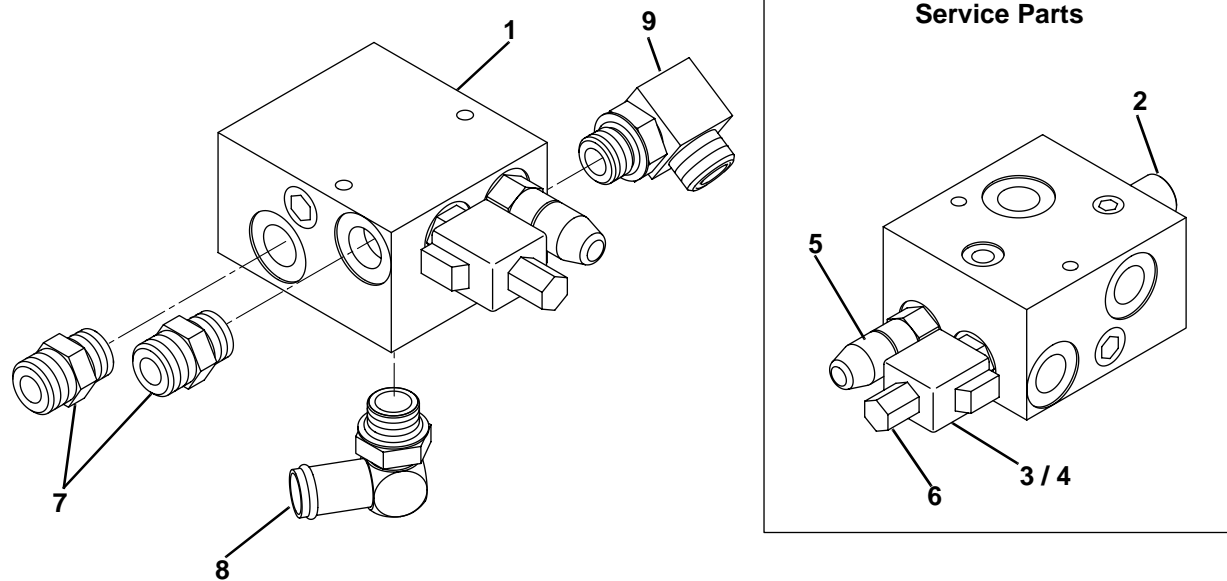


TC500-11

Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	122675	1	Wheel Motor	See 40.1
	463027	1	• Key	
2	590101	1	• Nut	
3	1003400	1	Left Brake Assembly	
4	1003399	1	Right Brake Assembly	
	5003192	1	• Replacement Shoe Kit	
	5003193	1	• Spring Kit	
5	2000138	1	Brake Drum	
6	403752	4	Screw, 5/16-18 x 1" Soc Flat Head	
7	446134	4	Lockwasher, 5/16	
8	400182	4	Screw, 5/16-18 x 5/8" Hex Head	
9	339989	2	Adaptor, Straight	
10	447030	1	Lockwasher, 1" External Tooth	
11	3007306	1	Adaptor, Motor	

> Change from previous revision

32.1 Deck Valve

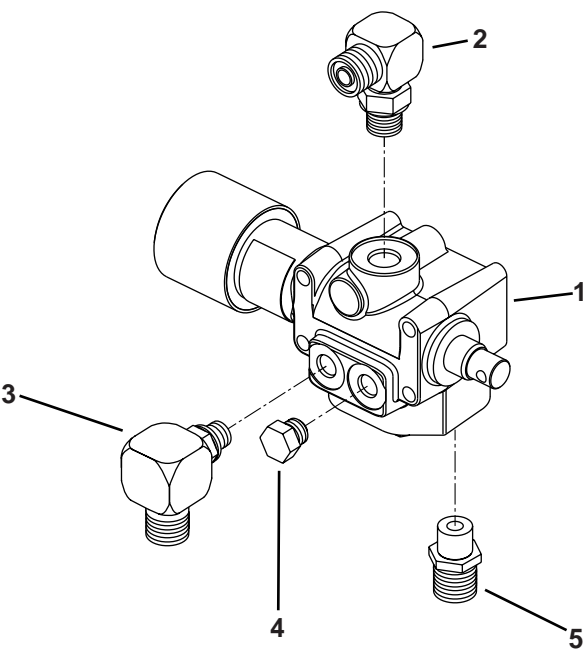


TC500-21

Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	1002405	1	Deck Valve	
	5002943	1	• Seal Kit	
2	5002939	1	• Pilot Operated Check Valve	
3	5002940	1	• N.O. 2 Way Cartridge	
4	5002941	1	• 12V, 30W Double Lead Coil	
5	5002942	1	• Relief Cartridge (3000 Psi)	
6	5003367	1	• Nut, Coil	
7	339994	2	Adaptor, Striaight	
8	3005602	1	Fitting, 90° Beaded	
9	340074	1	Adaptor, 90°	

> Change from previous revision

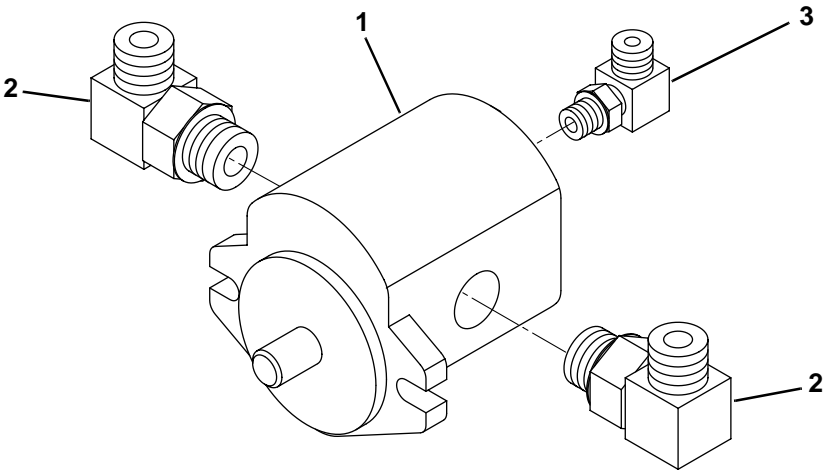
33.1 Lift Valve



TC500-22

Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	3010721	1	Valve, Lift	
2	340061	1	Adaptor, 90°	
3	340059	1	Adaptor, 90°	
4	154962	1	Plug	
5	339979	1	Adapter, Straight	

> Change from previous revision



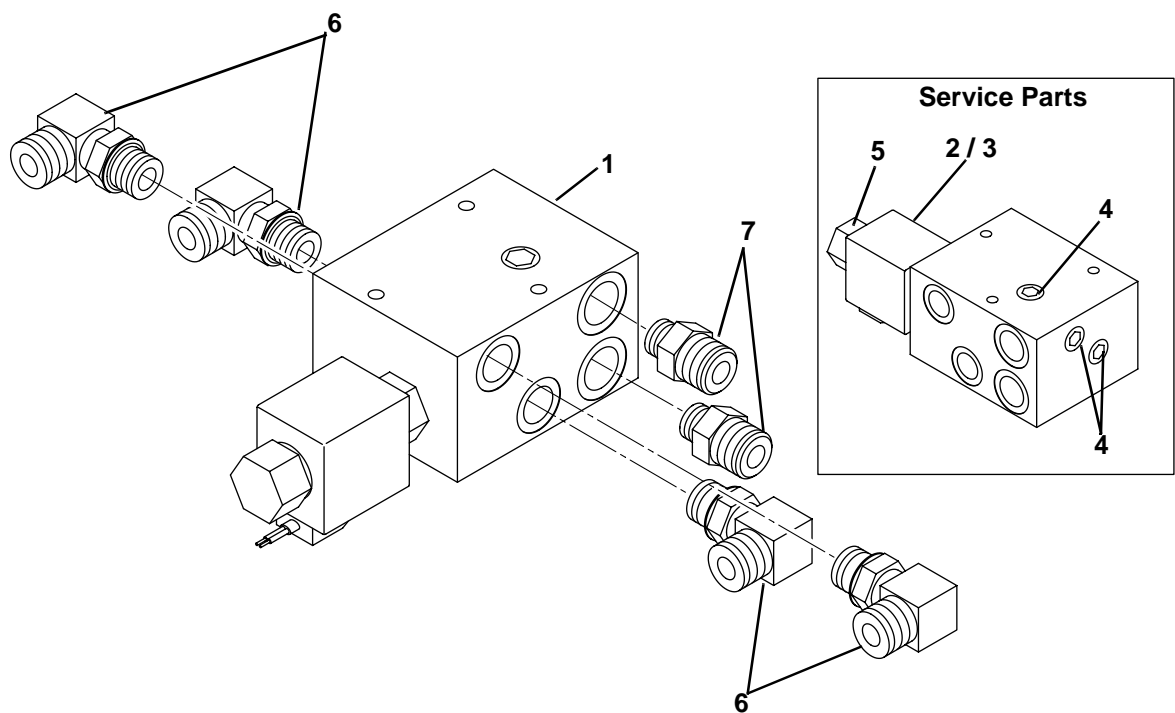
TC500-24

Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	1002411	1	Motor, Gear	
	5003159	1	Seal Kit	
2	340071	2	Adaptor, 90°	
3	340061	1	Adaptor, 90°	

> Change from previous revision

35.1 4WD Valve

Serial No. 66149 All
Serial No. 66150 All



TC500-23

Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	1003142	1	Valve, 4WD	
	5002947	1	• Seal Kit	
2	5002944	1	• 2 Position 3 Way Cartirdge	
3	5002945	1	• 12V, 42W Double Lead Coil	
4	5002946	3	• Hollow Hex Plugs	
5	5003195	1	• Nut	
6	340066	4	Adaptor, 90°	
7	339989	2	Adaptor, Straight	

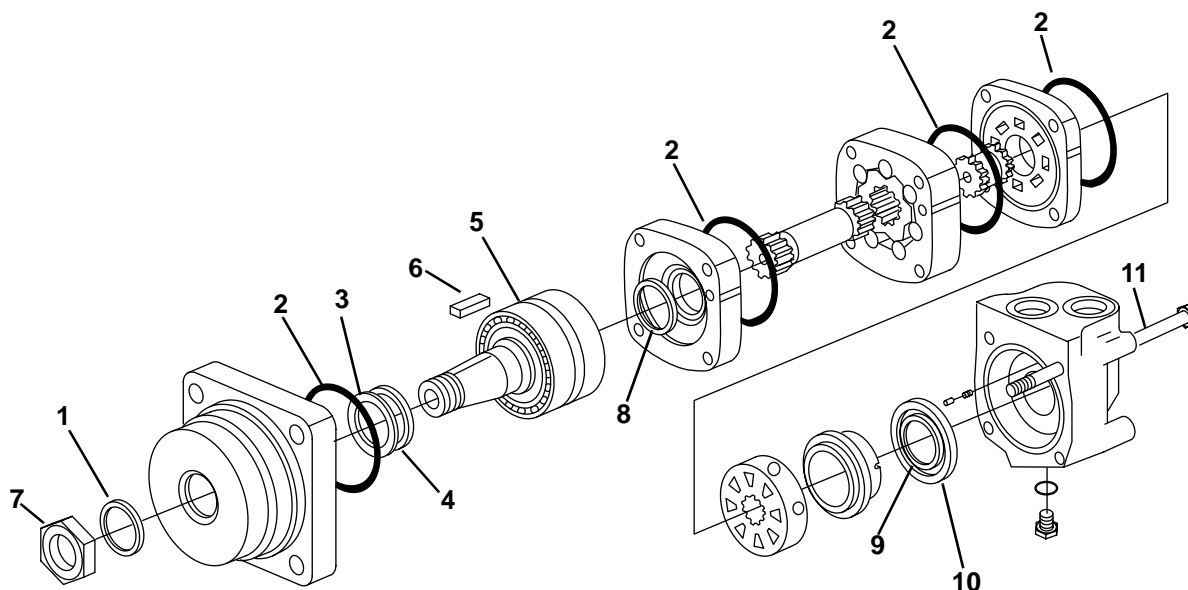
> Change from previous revision

TURFCAT 500 SERIES

36.1 Rear Wheel Motors

Part No. 395325

Serial No. 66149 All
Serial No. 66150 All



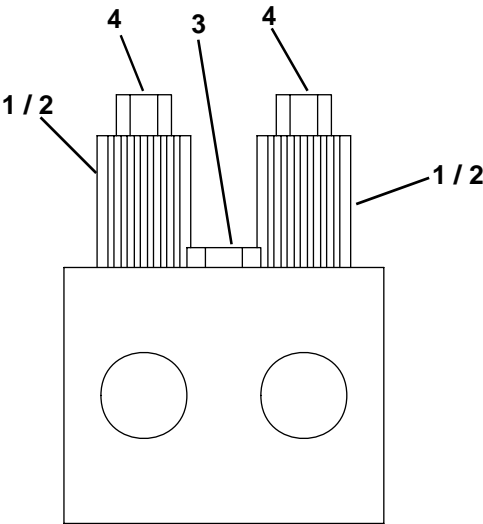
TC500-25

Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	A	1	Seal Exclusion	
2	A	4	Seal, 3" I.D.	
3	A	1	Back Up Ring	
4	A	1	Shaft Seal	
5	554781	1	Shaft and Bearing Kit	
6	554780	1	Key	
7	554779	1	Hex Nut	
8	A	1	Shaft Face Seal	
9	A	1	Inner Face Seal	
10	A	1	Outer Face Seal	
11	554954	4	Bolt	
A	554783	1	Seal Kit	Includes Items Marked A

> Change from previous revision

37.1 Differential Lock Valve

Part Number 1004268



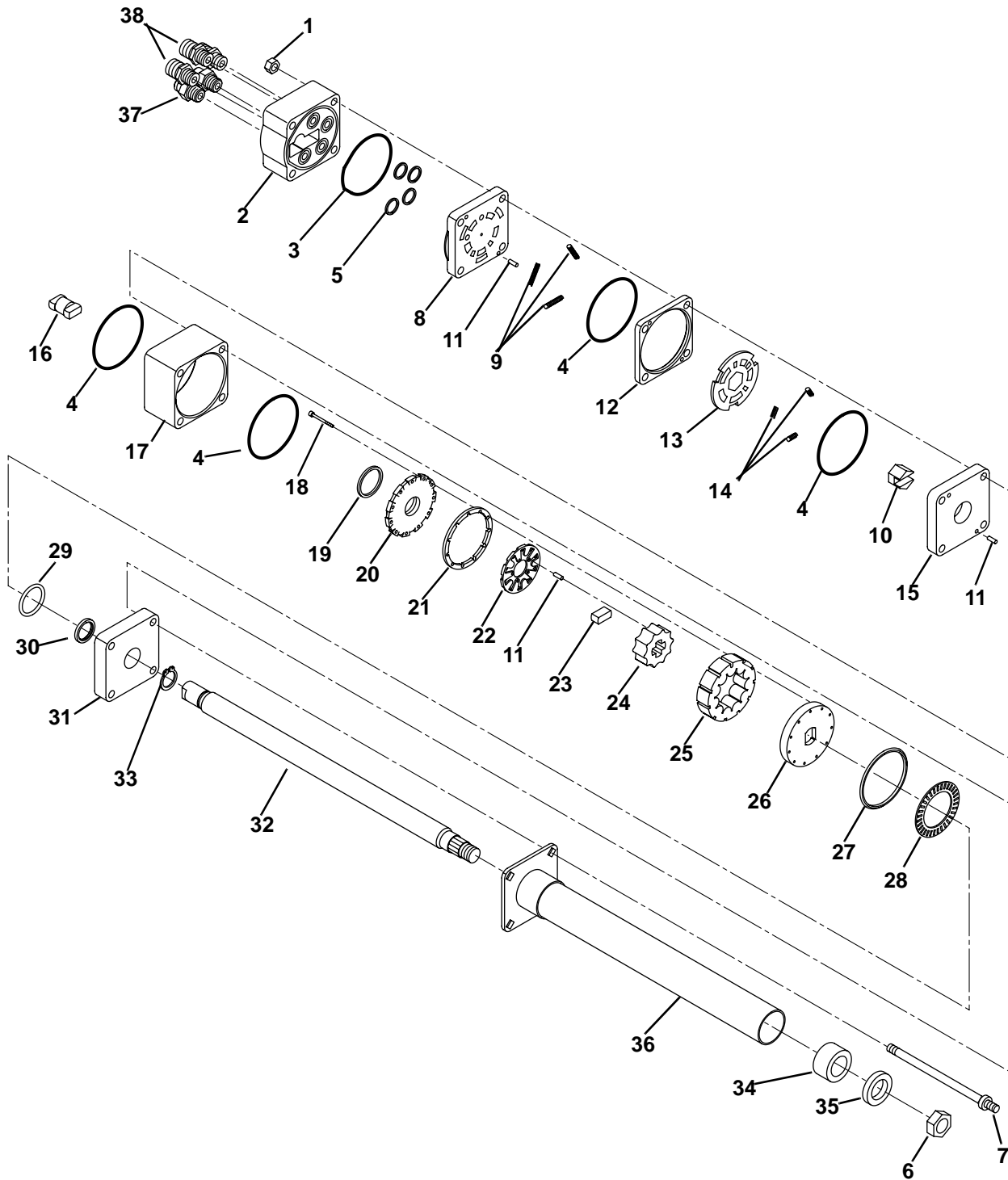
TC500-26

Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	5002940	2	N.O. 2 Way Cartridge	
2	5002941	2	12V, 30W Double Lead Coil	
3	5003365	1	Flow Divider Cartridge	
4	5003367	1	Nut, Coil	
	5003366	1	Seal Kit	

> Change from previous revision

38.1 Steering Valve

Part Number 1004704



Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	443108	4	Locknut, 5/16-18 Center	
2	N/S	1	Port Cover	
3	C	1	Seal, O-Ring	
4	C	4	Seal, O-Ring	
5	C	4	Seal, O-Ring	
6	443828	1	Nut, 5/16-18 Hex Jam	
7	N/S	4	Special Bolt	
8	N/S	1	Port Manifold	
9	B	3	Spring, Port Side 3/4"	
10	N/S	1	Hex Drive	
11	A and E	9	Needle Roller	
12	503398	1	Valve Ring	
13	503398	1	Valve Plate	
14	B	3	Spring, Shaft Side 1/2"	
15	N/S	1	Isolation Manifold	
16	N/S	1	Drive Link	
17	N/S	1	Metering Ring	
18	A	11	Screw, Socket Head	
19	C	1	Seal, Commutator	
20	A	1	Commutator Cover	
21	A	1	Commutator Ring	
22	A	1	Commutator	
23	A	1	Spacer	
24	A	1	Rotor	
25	A	1	Stator	
26	A	1	Drive Plate	
27	554855	1	Spacer	
28	554856	1	Thrust Bearing	
29	C	1	Face Seal	
30	554857	1	Seal, Spacer	
31	N/S	1	Upper Cover Plate	
32	D	1	Shaft	
33	D	1	Retaining Ring	
34	D	1	Bearing	
35	D	1	Seal	
36	D	1	Jacket	
37	339977	2	Adaptor, Striaight	
38	339979	3	Adaptor, Straight	
Service Kits				
A	5003548	1	Metering Assembly Kit	
B	502924	1	Spring Kit	
C	557738	1	Seal Kit	
D	5003219	1	Jacket Tube Kit	
E	502925	1	Needle Roller Kit	

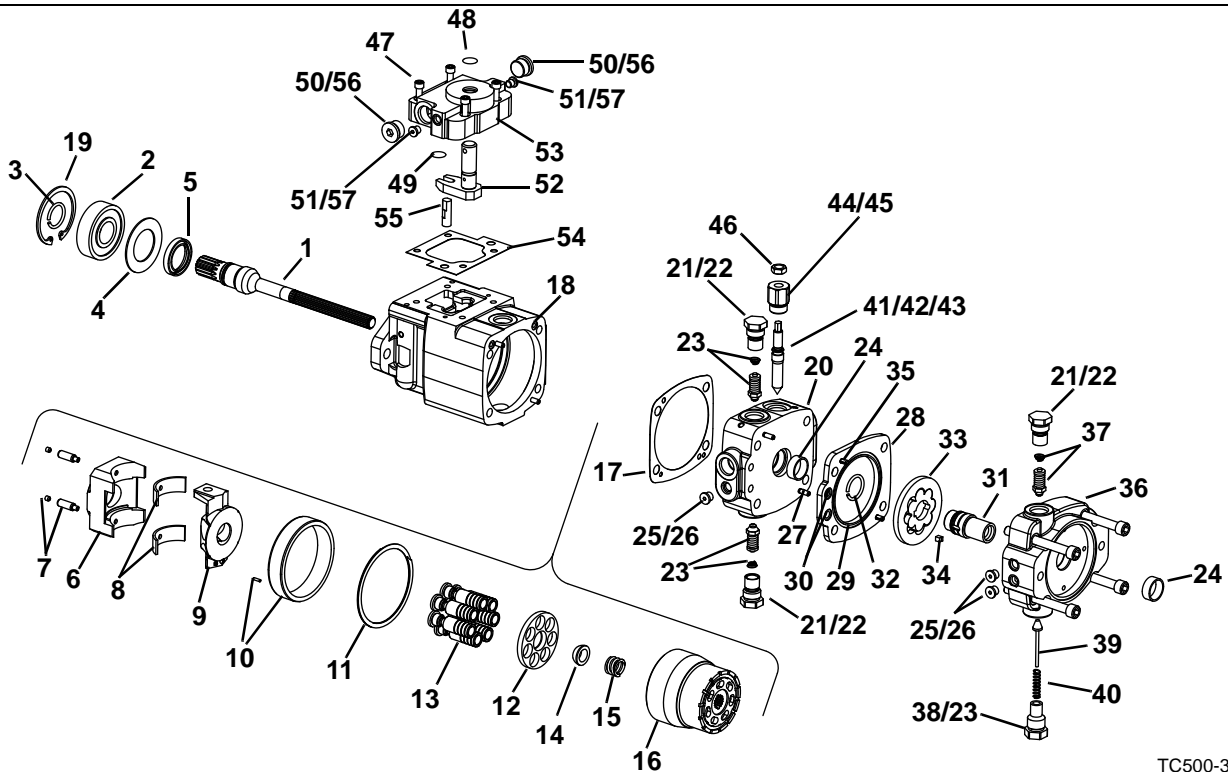
> Change from previous revision

TURFCAT 500 SERIES

39.1 Traction Pump

Part Number 1003271

Serial No. All



TC500-35

Item	Kit	Qty.	Description	Serial Numbers/Notes
1	D	1	Driveshaft, with SAE Spline	
2	D	1	Bearing, Front Driveshaft	
3	D	1	Ring, Shaft Retainer	
4	D	1	Retainer Seal	
5	H	1	Shaft Seal	
6	K	1	Block, Saddle	
7	K	2	Saddle Locating Pin with Orifice	
8	K and L	2	Bearing, Saddle	
9	M	1	Swashblock	
10	J	1	Bearing, Hydrodynamic Cylinder	
11	J	1	Ring, Retainer	
12	I	1	Retainer, Shoe	
13	I	1	Piston and Shoe Assembly	
14	I	1	Ball, Fulcrum	
15	I	1	Spring, Shoe Retainer	
16	I	1	Barrel, Cylinder	
17	H	1	Gasket, Valve Plate	
18	H	2	O-Ring	
19	D	1	Ring, Bearing Retainer	
20	F	1	Valve Plate	
21	E, F	3	Cap, Relief Valve	
22	E, F, H	4	O-Ring	
23	F	2	Relief Valve	

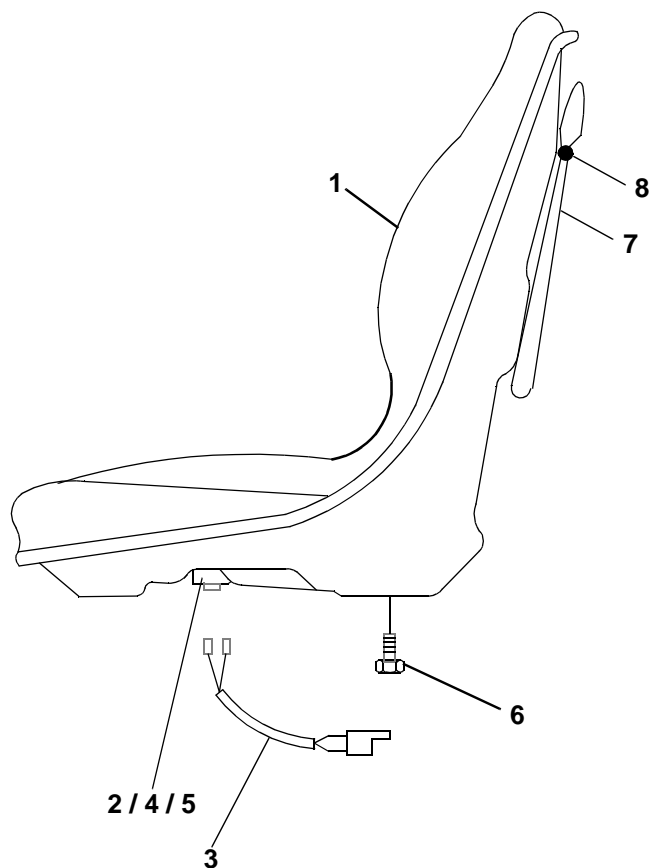
TURFCAT 500 SERIES

Item	Kit	Qty.	Description	Serial Numbers/Notes
24	E and F	1	Bushing, Geroter coupling	
25	E and F	3	Plug, #3	
26	E, F, H	3	O-Ring	
27	F	2	Pin, Locating	
28	A	1	Plate, Gerotor Housing	
29	A and H	2	O-Ring	
30	A and H	4	O-Ring	
31	B	1	Coupling, Gerotor	
32	B	1	Ring, Retaining	
33	B	1	Gerotor Pump	
34	B	1	Key, Gerotor	
35	E	2	Pin, Locating	
36	E	1	Rear Plate	
37	E	2	Relief Valve	
38	E	1	Cap	
39	E	1	Poppet	
40	E	1	Spring	
41	C and F	1	Stem, Tow Valve	
42	C, F, H	1	O-Ring	
43	C, F, H	1	Ring, Backup	
44	C and F	1	Bonnet, Tow Valve	
45	C, F, H	1	O-ring	
46	C and F	1	Nut, 3/8-24 Jam	
47	G	4	Screw, 1/4-20 x 1" Socket Head	
48	G and H	1	O-Ring	
49	G and H	2	O-ring	
50	G	2	Plug, #8	
51	G	2	Plug, #2	
52	G	1	Arm and Pintle Assembly	
53	G	1	Housing, Control	
54	G and H	1	Gasket, Control	
55	G	1	Pin, Control	
56	G and H	2	O-Ring	
57	G and H	2	O-ring	
Service Kits				
A	5003494	1	Gerotor Housing Parts	
B	5003495	1	Gerotor and Coupling	
C	5003497	1	Tow Valve	
D	5003498	1	Shaft and Bearing	
E	5003513	1	Rear Plate	
F	5003496	1	Valve Plate (Front Half)	
G	5003504	1	MS Control Parts	
H	5003505	1	Gasket and Seals	
I	5003499	1	Rotating Group	
J	5003500	1	Rotating Group Bearing	
K	5003501	1	Saddle	
L	5003502	1	Saddle Bearing	
M	3003503	1	Swashblock	

TURFCAT 500 SERIES

40.1 Seat

Serial No. All

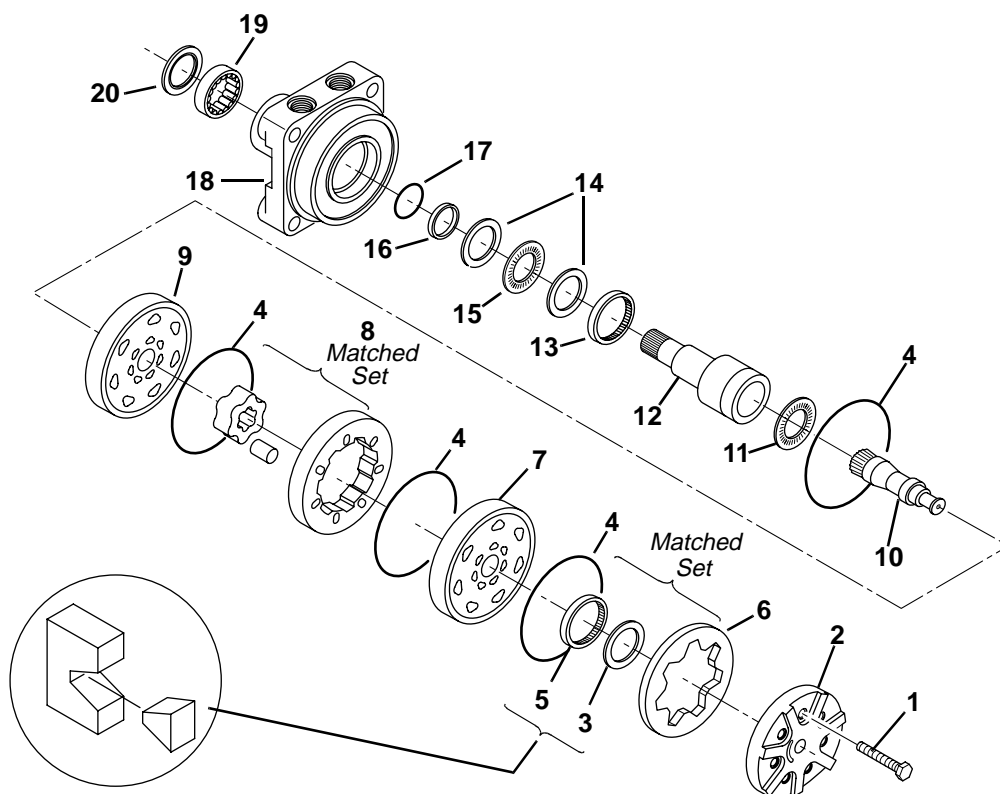


Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	1002948	1	Seat, Gray	
2	554390	1	• Switch	
3	163583	1	• Wire Harness	
4	434011	2	• Screw, 1/4-20 x 5/8" Socket Head	
5	446130	2	• Lockwasher, 1/4 Heavy	
6	403770	4	Screw, 5/16-18 x 3/4" Hex Flange	
7	3003928	1	Liturature Pouch	
8	3001328	2	Screw, 5/16-18 x 5/8" Hex Washer	

> Change from previous revision

41.1 Front Wheel Motor

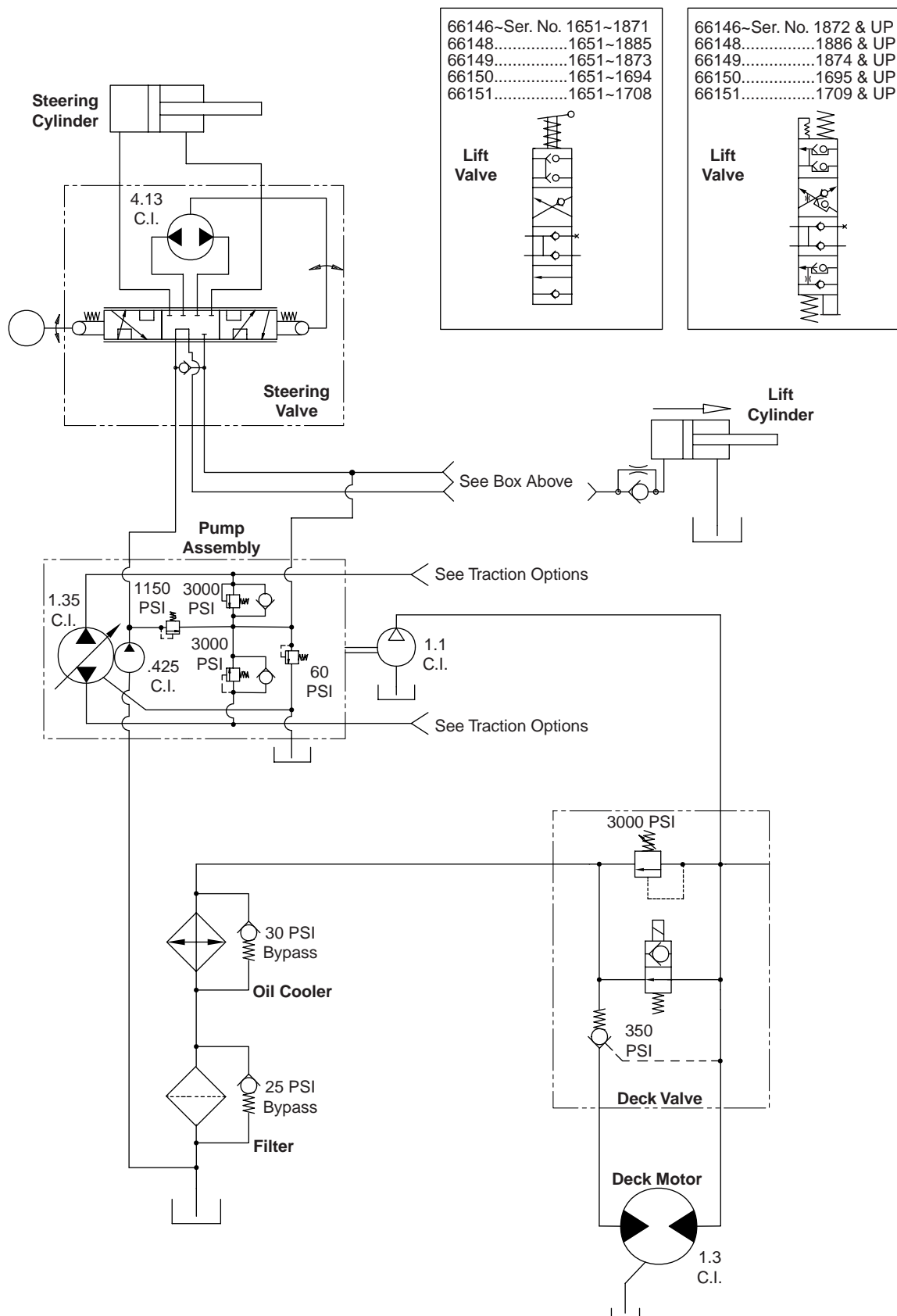
Part Number 122675



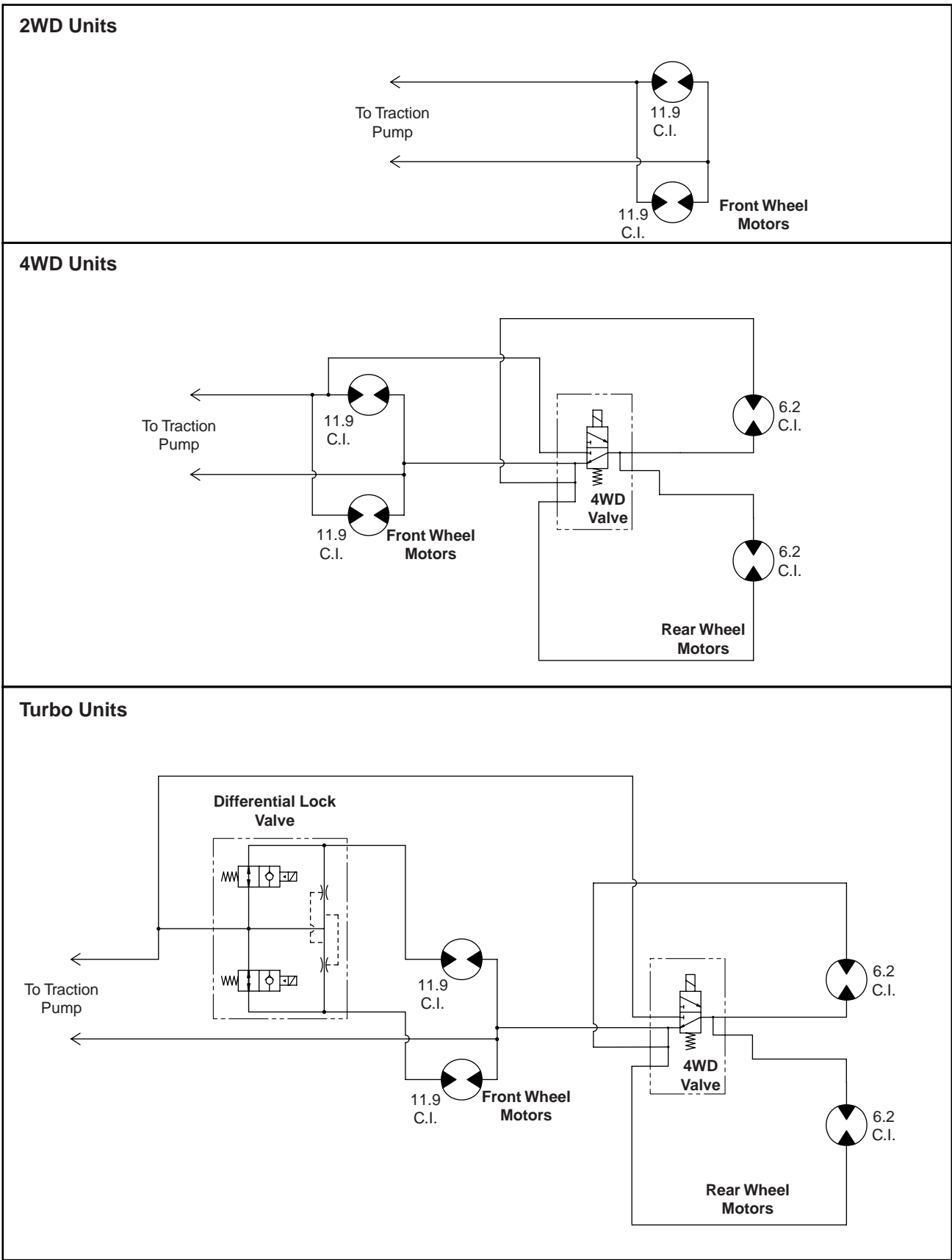
Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	554513		Special Bolt	
2	N/S		End Cover	
3	★		Bonded Ring	Included in Seal Kit
4	★		Seal Ring	Included in Seal Kit
5	N/S		Commutator	
6	N/S		Commutator Ring	
7	N/S		Manifold	
8	N/S		Rotor Assembly	
9	N/S		Wear Plate	
10	N/S		Drive Link	
11	554514		Thrust Bearing	
12	554515		Coupling Shaft	
13	554516		Bearing	
14	554517		Thrust Washer	
15	554518		Thrust Bearing	
16	★		Shaft Seal	Included in Seal Kit
17	★		Backup Ring	Included in Seal Kit
18	N/S		Housing Assembly	
19	554519		Bearing	
20	★		Seal	Included in Seal Kit
21	★		Shim, Seal (Not Shown)	Included in Seal Kit
★	554753		Seal Kit	Includes Grease Pack

> Change from previous revision

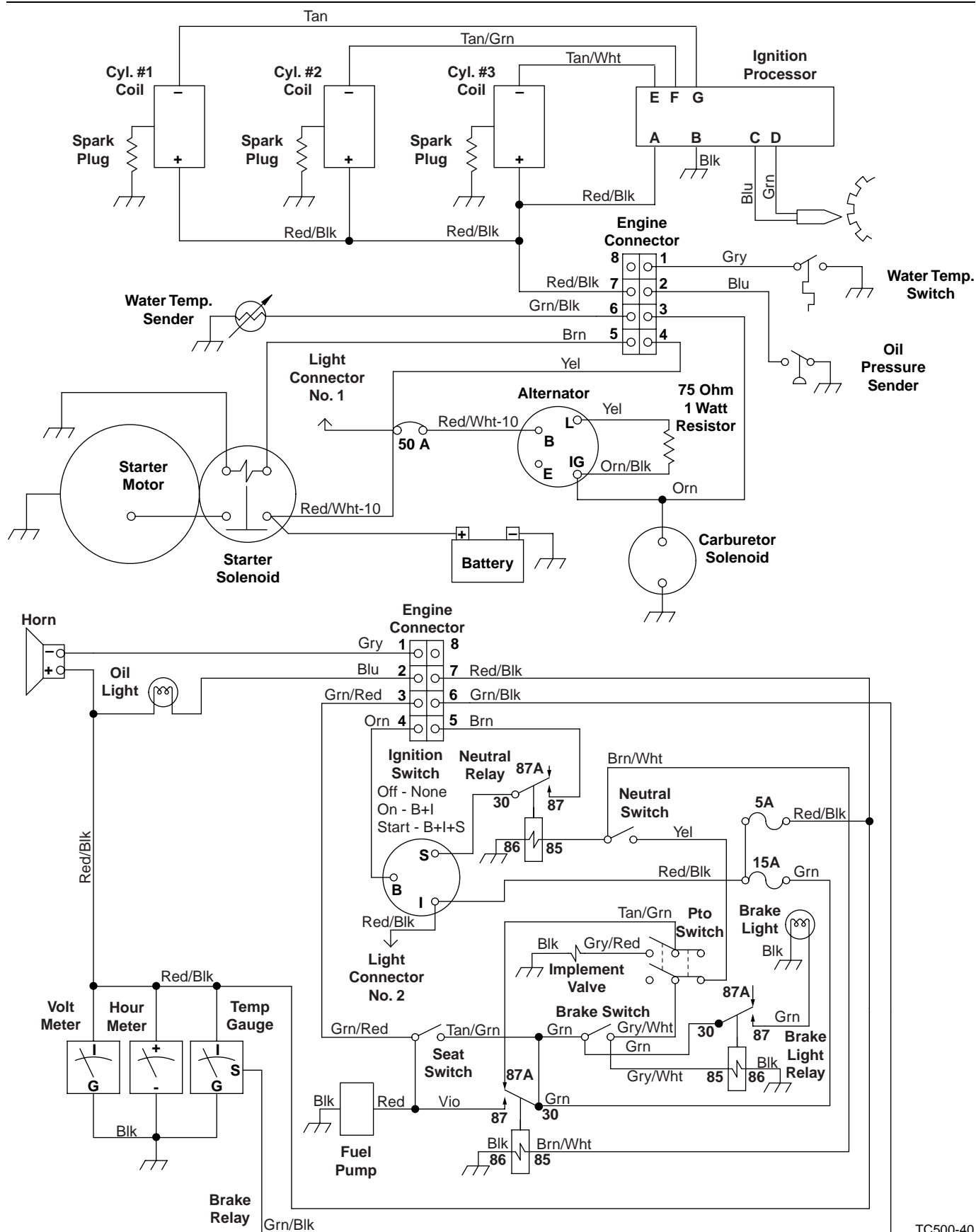
42.1 Hydraulic Schematic



42.1 Hydraulic Schematic (Traction Options)

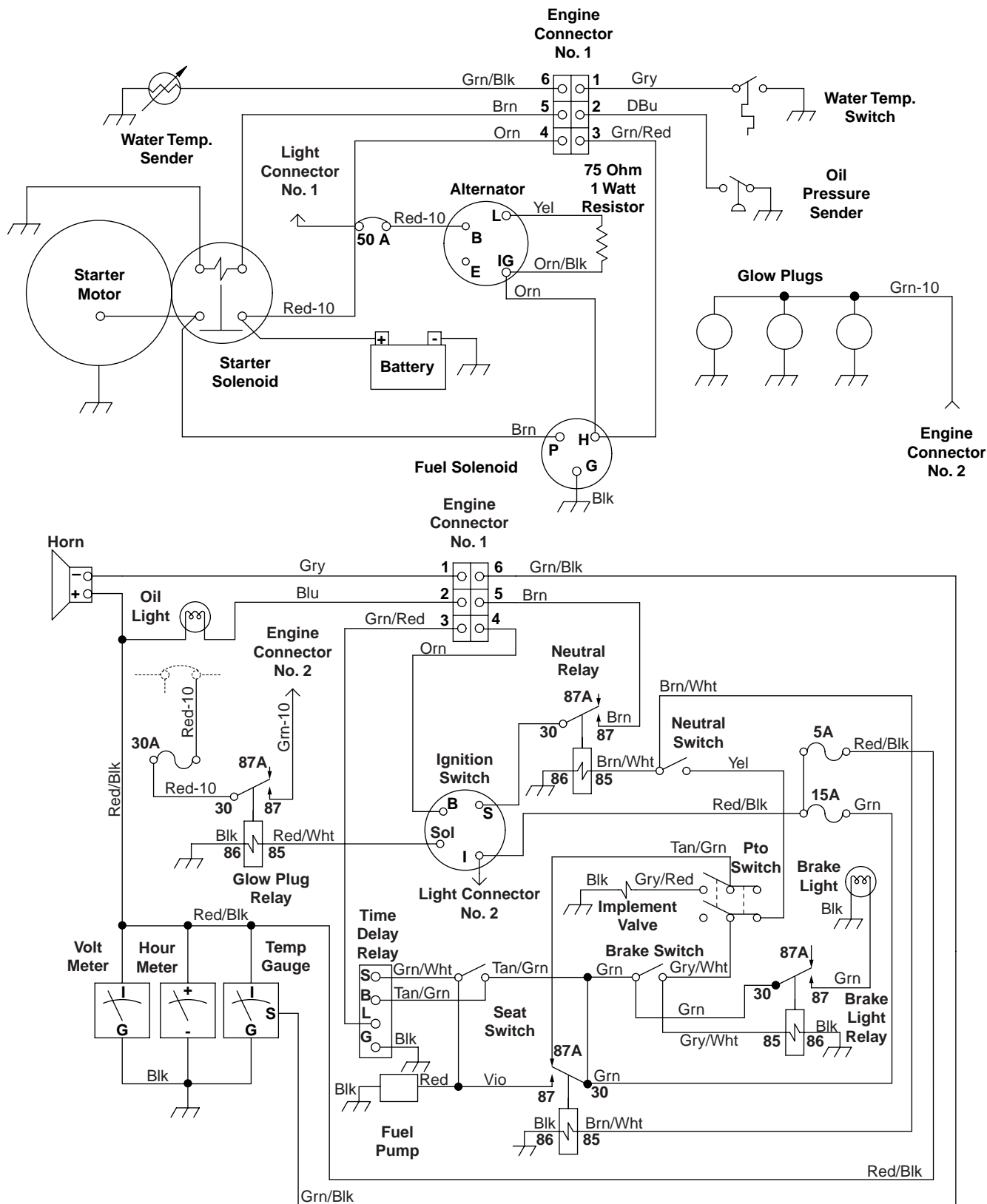


43.1 Electrical Schematic (Gas Units)

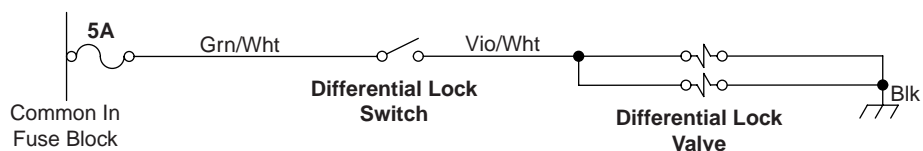


44.1 Electrical Schematic Diesel Units

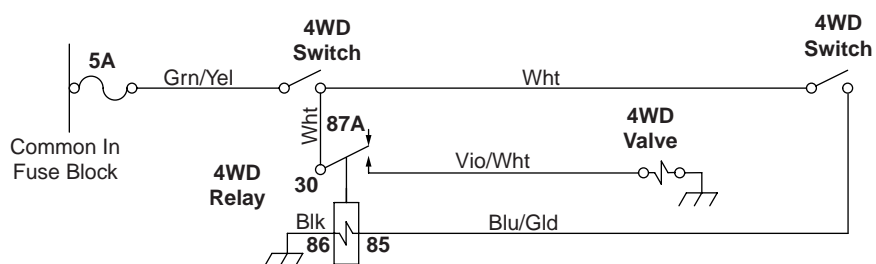
Serial No. 66146 All
Serial No. 66148 All
Serial No. 66149 All
Serial No. 66150 All



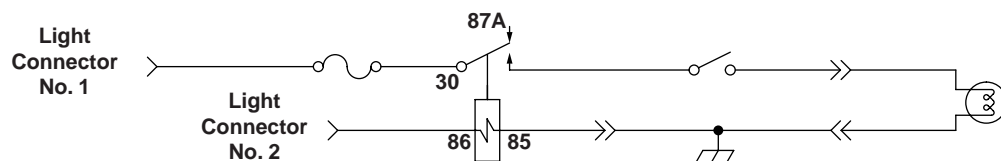
Differential Lock Option (Included with Turbo Units)



4WD Option (Included with 4WD Units)






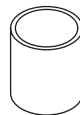
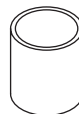



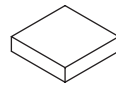


Light Option



> Change from previous revision

Fluids and Compounds

Hydraulic Fluid*		
5001405	Two 2-1/2 Gallon Container of ISO VG68 Oil	
5001404	One 5 Gallon Pail of ISO VG68 Oil	
502696	Two 2-1/2 Gallon Container of 10W30 Oil	
502693	One 5 Gallon Pail of 10W30 Oil	
503409	Two 2-1/2 Gallon Container of ATF Fluid	
503407	One 5 Gallon Pail of ATF Fluid	
2-Cycle Oil		
554600	Twenty Four 16 Ounce Plastic Container	
554599	Twenty Four 8 Ounce Plastic Container	
Grease		 
5000067	One 5 Gallon Pail OO-Grease	
5000068	Twenty Four 8 Ounce Tube OO-Grease	
Paint		 
5003469	16 Ounce Gray Aerosol	
554598	Six 12 Ounce Orange Aerosol	
546408	Twelve 1 Quart Can Orange	
546409	Two 1 Gallon Can Orange	
Lapping Compound		
5002488	One 10 Pound Pail of 80 Grit	
5002490	One 25 Pound Pail of 80 Grit	
5002489	One 10 Pound Pail of 120 Grit	
5002491	One 25 Pound Pail of 120 Grit	
Specialty Compound		 
365422	5.3 Ounce Tube of Electrical Insulating Gel	
5001581	14 Ounce Can of Lubriplate Multi Lube A	
Biodegradable Hydraulic Fluid*		
5003102	One 55 Gallon Drum TTCSP Greens Care 68	
5003103	One 5 Gallon Pail TTCSP Greens Care 68	
5003105	One 55 Gallon Drum TTCSP Greens Care 46	
5003104	One 5 Gallon Pail TTCSP Greens Care 46	
5003106	Twenty Four 14 Ounce Tube Greens Care Grease	
O-Ring Kit		
5002452	SAE O-Ring Boss (3/32 ~ 2" Tube O.D.)	
5002453	Common O-Ring Kit	
5002454	O-Ring Face Seal ORFS (-4 ~ -24 ORS Tube Size)	
Fuel Cans		
554948	One 2.5 Gallon Plastic	
554948	One 5 Gallon Plastic	
Right Start Kit for New Machines		
See your local TTCSP Dealer		
On-Time Maintenance Kit		
See your local TTCSP Dealer		

* Refer to the Parts & Maintenance manual for the correct hydraulic oil requirements for your machine.

Textron Turf Care And Specialty Products offers a High Usage Parts Catalog illustrating commonly used Parts through easy to read line Drawings. See your local TTCSP Dealer for a copy.

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